

Set	Items	Description
S1	949581	AUDIO? OR VIDEO? OR PHOTOGRAPH? OR MULTIMEDIA? OR MULTI()M- EDIA?
S2	426412	GRAPHIC? OR PICTUR? OR PICTOR? OR MUSIC OR SONG? ? OR MOVI- E? ? OR MOTION()IMAGE?
S3	90196	JUKEBOX? OR MPEG OR JPEG OR DVD OR DVDS OR DIGITAL() (CONTE- NT? OR DATA OR INFO OR INFORMATION?)
S4	16451	INTEGRAT?()MEDIA? OR DIGITAL() (VIDEO OR VERSATIL?) () (DISC? OR DISK?)
S5	8099324	DEVICE? OR UNIT? ? OR MODULE? ? OR APPLIANCE? OR EQUIPMENT? OR SERVER?
S6	1623656	CONTROLLER? OR COMPUTER? OR CPU OR CPUS
S7	936945	CENTRAL()PROCESS? OR PROCESSOR? OR MICRO()PROCESS? OR DATA- ( )PROCESS? OR MICROCOMPUTER? OR WORKSTATION? OR WORK()STATION?
S8	2298487	CHIEF? OR MAIN OR MANAGER? OR MANAGING? OR MASTER? OR CENT- ER? OR CENTRAL?
S9	4173328	HUB OR HUBS OR PRIMARY OR PRINCIPAL OR CONTROLLER? OR CONT- ROLLING? OR CONTROL
S10	2033259	MULTIP? OR MULTIT? OR SEVERAL? OR NUMEROUS? OR MORE(2W)ONE OR TWO(2W)MORE OR ASSEMBLY? OR ASSEMBLIE?
S11	595330	COLLECTION? OR NETWORK? OR LAN OR WAN OR LANS OR WANS OR I- NTERNET? OR ETHERNET? OR EXTRANET?
S12	277984	ONLINE? OR INTRANET? OR COMMUNICAT?()SYSTEM? OR WAP OR WAPS OR LIBRAR? OR ARCHIV? OR VARIET?
S13	952821	SYNCHRON? OR SYNCRON? OR COINCID? OR SIMULTAN? OR (RENDER? OR MAKE?) ()IDENTICAL? OR IDENTICALIZ? OR IDENTICALIS?
S14	325200	("SAME" OR IDENTIC? OR SIMILAR?) ()TIME? ? OR SYNC?? OR SYN- K?? OR CONTEMPORAN? OR CONCURREN? OR COOCCURR? OR CO()OCCUR?
S15	358964	UPDAT? OR UP(2W)DATE OR RESET? OR REFRESH? OR RELOAD? OR R- ESTOR? OR RENEW? OR REENABL?
S16	199699	PATCH? OR UPGRAD? OR FIXUP? OR REGENERAT? OR REPLENISH? OR REVITAL? OR REJUVENAT?
S17	1016510	DOWNLOAD? OR DOWN()LOAD? OR UPLOAD? OR UP()LOAD? OR INSTAL- L? OR (DOWN OR UP) ()LINK? OR DOWNLINK? OR UPLINK?
S18	2566592	RETRIEV? OR STORE? OR STORING? OR STORAG? OR RECORDING?
S19	381837	(DATA OR FILE? OR RECORD?) (3N) (TRANSFER? OR TRANSMI? OR OF- FLOAD? OR UNLOAD? OR FEED? OR FLOW?)
S20	69	ARQPRO OR ARQ()PRO OR AUDIOREQUEST()PRO OR AUDIO()REQUEST(- )PRO OR AMX OR REQUEST() (MULTIMEDIA OR MULTI()MEDIA)
S21	3215979	IC=(G06? OR H04N? OR H04L? OR G09B? OR G10H? OR G06T? OR H- 04H? OR G11B? OR H04M?)
S22	2176511	MC=(T01? OR T05? OR W03? OR W04? OR W06? OR X22? OR W02?)
S23	5	S20 AND S13:S14
S24	103428	S1:S4 AND S5:S7 AND S13:S14
S25	27204	S24 AND (S8:S9 OR S10:S12) (5N)S5:S7
S26	14368	S24 AND S15:S19(7N)S13:S14
S27	37486	S25:S26
S28	326	S27 AND S15:S16 AND S17:S19 AND S8:S9 AND S10:S12
S29	6471	S27 AND S13:S14(7N)S15:S19(7N)S1:S4
S30	2625	S29 AND S8:S12(7N)S5:S7
S31	2428	S30 AND S21:S22
S32	0	S31 AND S1:S4(5N)S5:S7 AND S8:S12(5N)S5:S7 AND S13:S14(5N)- 15:S19
S33	1576	S31 AND S1:S4(5N)S5:S7
S34	1576	S33 AND S8:S12(7N)S5:S7
S35	395	S34 AND S8:S9 AND S10:S12
S36	331	S35 AND S15:S19(10N)S13:S14
S37	345	S35 AND S15:S19(5N)S1:S4
S38	35	S28 AND S37
S39	614	(S28 OR S37) AND S21:S22
S40	288	S36 AND S37

S41	288	S40 AND S21:S22
S42	33	S28 AND S41
S43	40	S23 OR S38 OR S42
S44	821543	PR=2002:2005
S45	39	S43 NOT S44
S46	39	IDPAT (sorted in duplicate/non-duplicate order)
S47	164	S39 AND S13:S14/TI
S48	121	S47 AND S1:S4/TI
S49	78	S48 AND S15:S19/TI
S50	69	S49 NOT S44
S51	69	IDPAT (sorted in duplicate/non-duplicate order)
S52	100	S46 OR S51

? show files

File 347:JAPIO Nov 1976-2005/Feb(Updated 050606)

(c) 2005 JPO & JAPIO

File 350:Derwent WPIX 1963-2005/UD,UM &UP=200546

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?

52/3,K/1 (Item 1 from file: 347)  
DIALOG(R)File 347:JAPIO  
(c) 2005 JPO & JAPIO. All rts. reserv.

07638064 \*\*Image available\*\*

MULTIMEDIA SYNCHRONIZATION METHOD AND DEVICE

PUB. NO.: 2003-131918 [JP 2003131918 A]

PUBLISHED: May 09, 2003 (20030509)

INVENTOR(s): CARTER HARRY B III

COCOCCIA RONALD

PIECH ZACHARY

REINE JOHN

SAUTER SILVAN

VASQUEZ STEVEN

WILLIS CRAIG

YOUN HYUNG-JUN BRUTUS

APPLICANT(s): REQUEST MULTIMEDIA

APPL. NO.: 2002-177726 [JP 2002177726]

FILED: June 18, 2002 (20020618)

PRIORITY: 01 884661 [US 2001884661], US (United States of America),  
June 19, 2001 (20010619)

MULTIMEDIA SYNCHRONIZATION METHOD AND DEVICE

INTL CLASS: G06F-012/00 ; H04N-005/765 ; H04N-007/173

#### ABSTRACT

PROBLEM TO BE SOLVED: To provide an apparatus and system for providing recorded **multimedia** programming in digital form, in a multimedia player device.

SOLUTION: A system for **synchronizing** a multiplicity of devices in a **multimedia** environment has at least one **central storage** and interface **device**, where **audio**, **video** and **photographic** information including content information and content management information, relating to at least one user, are **stored** in digital form. The system further has a plurality of zones, each having a zone-specific **storage** and interface **device**, capable of **storing** or interfacing information **stored** into the **central storage** and interface **device**, where **audio**, **video** or **photographic** information, relating to at least one user, contained within each one of the plurality of zone-specific **storage** and interface **devices** and the **central storage** and interface **device**, are **updated** in relation with other zone-specific **storage** and interface **devices** and the **central storage** and interface **device**.

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*THIS APPLICATION,  
JAPANESE  
VERSION*

52/3,K/3 (Item 3 from file: 347)  
DIALOG(R)File 347:JAPIO  
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06037768 \*\*Image available\*\*  
RECORDING DEVICE , RECORDING SYSTEM AND RECORDING METHOD

PUB. NO.: 10-320868 [JP 10320868 A]  
PUBLISHED: December 04, 1998 (19981204)  
INVENTOR(s): KATSUYAMA AKIRA  
TAKENAKA YOSHIAKI  
APPLICANT(s): SONY CORP [000218] (A Japanese Company or Corporation), JP  
(Japan)  
APPL. NO.: 10-041970 [JP 9841970]  
FILED: February 24, 1998 (19980224)

RECORDING DEVICE , RECORDING SYSTEM AND RECORDING METHOD

INTL CLASS: G11B-015/02 ; H04N-005/7826  
...JAPIO CLASS: Equipment ); 44.6 (COMMUNICATION  
...JAPIO KEYWORD: Video Tape Recorders, VTR); R131 (INFORMATION PROCESSING

... Microcomputers & Microprocessors)

ABSTRACT

PROBLEM TO BE SOLVED: To provide a recording device , a recording system and a recording method capable of completely recording a program reserved for video recording even if the broadcasting time of the program reserved for video recording is advanced because of the extended broadcasting of a previous program...

...SOLUTION: When the video recording reservation of timer video recording is set, the audio mode of a program reserved for video recording is selected. An audio mode identifying signal is supplied from an audio multiple decoder 15 to a controller 31 for controlling an operation during timer video recording , and the audio mode of a received signal is determined. During timer video recording , determination is made based on video recording time as a reference as to whether the audio mode of the received signal is coincident with a set audio mode or not, and when coincidence is determined, video recording is started. A difference in time until both audio modes coincide with each other is counted, added to video recording finishing time and then the video recording time is renewed .

52/3,K/15 (Item 6 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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016738704 \*\*Image available\*\*  
WPI Acc No: 2005-063001/200507  
XRPX Acc No: N05-054482

Image data decoding method in personal computer , involves performing motion compensated prediction operation in graphics processor using processed image data and storing context data for different video streams at same time

Patent Assignee: HITACHI AMERICA LTD (HITA )  
Inventor: PEARLSTEIN L; SAZZAD S M  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6829303	B1	20041207	US 99442363	A	19991117	200507 B

Priority Applications (No Type Date): US 99442363 A 19991117

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6829303	B1	9	H04N-007/12	

Image data decoding method in personal computer , involves performing motion compensated prediction operation in graphics processor using processed image data and storing context data for different video streams at same time

Abstract (Basic):

... A motion compensated prediction operation is performed in graphics processor using processed image data. Multiple sets of context information is stored in the decoder circuit for different video streams at the same time , where each set of stored context information that includes vertical/horizontal size and frame rate data, corresponds to different encoded video data streams processed by the decoder.

... For decoding MPEG -2 image data/ video data in central processing unit in personal computer , and digital high definition television (HDTV...

...Increases the computer system's ability to perform video decoding operations, at lower implementation cost of decoder hardware circuit...

...The figure shows a block diagram of the computer system with video front end processor for decoding encoded video .

...Title Terms: COMPUTER ;

International Patent Class (Main): H04N-007/12

International Patent Class (Additional): H04N-011/02 ...

... H04N-011/04

Manual Codes (EPI/S-X): T01-J10D ...

... W03-A11G ...

... W04-P01A4

52/3,K/20 (Item 11 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

015948454 \*\*Image available\*\*  
WPI Acc No: 2004-106295/200411  
XRPX Acc No: N04-084527

Client- server data synchronization method in computer network ,  
involves providing information to server to enable database to  
synchronize stored graphical control and data, in response to user  
interaction

Patent Assignee: TRILOGY DEV GROUP INC (TRIL-N)  
Inventor: GAWISER B C; TOUB J B  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6674450	B1	20040106	US 2000549270	A	20000414	200411 B
			US 2000567303	A	20000508	

Priority Applications (No Type Date): US 2000567303 A 20000508; US  
2000549270 A 20000414

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6674450	B1	18	G06F-003/00	CIP of application US 2000549270

Client- server data synchronization method in computer network ,  
involves providing information to server to enable database to  
synchronize stored graphical control and data, in response to user  
interaction

Abstract (Basic):

... A web page with dynamic HTML code corresponding to an  
interactive data-bound graphical control , is provided to a client  
(220). The client interprets the codes using web browser application  
and determines a user interaction with the displayed graphical  
control . A server (230) is provided with information to enable the  
database to synchronize stored graphical control and data, in  
response to the user interaction.

... 1) computer readable medium having set of instructions for  
synchronizing client-side and server -side data...

...2) client- server data synchronization apparatus...

...3) method of processing data requests received at server computer ;  
(...)

...4) computer readable medium including program requests to process data  
requests received at server computer ;  
(...)

...5) client- server data synchronization system...

...For synchronizing client-side and server -side data using interactive  
data-bound graphical control , in computer networks such as  
Internet , local area network ( LAN ).  
...

...The interactive data-bound graphical controls are interactively  
manipulated by the user and corresponding data on the server is  
modified without the user needing to install executable software other  
than the standard Internet browser software...

...The figure shows a data flow diagram explaining the data communication between client and **server computers** .

...

... **server** (230

...Title Terms: **SYNCHRONISATION** ;

International Patent Class (Main): **G06F-003/00**

International Patent Class (Additional): **G06F-015/163** ...

... **G06F-017/30**

Manual Codes (EPI/S-X): **T01-J12B1** ...

... **T01-N02A2C** ...

... **T01-N03A1** ...

... **T01-N03B2** ...

... **T01-S03**

52/3,K/23 (Item 14 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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*THIS APPLICATION*

015300909 \*\*Image available\*\*  
WPI Acc No: 2003-361843/200334  
XRPX Acc No: N03-288915

Device synchronization system in multimedia environment, updates user specific information stored in zone specific devices based on information stored in central storage /interface device  
Patent Assignee: REQUEST MULTIMEDIA (REQU-N); CARTER H N (CART-I); COCOCCIA R (COCO-I); PIECH Z (PIEC-I); REINE J (REIN-I); SAUTER S (SAUT-I); VASQUEZ S (VASQ-I); WILLIS C (WILL-I); YOUN H B (YOUN-I)  
Inventor: CARTER H B; COCOSIA R; LIYUNG-JUN B Y; PICCH Z; REINE J; SAUTER S ; VASQUEZ S; WILLIS C; CARTER H N; COCOCCIA R; PIECH Z; YOUN H B  
Number of Countries: 004 Number of Patents: 004  
Patent Family:  
Patent No Kind Date Applicat No Kind Date Week  
US 20020194309 A1 20021219 US 2001884661 A 20010619 200334 B  
GB 2379533 A 20030312 GB 200213763 A 20020614 200334  
JP 2003131918 A 20030509 JP 2002177726 A 20020618 200339  
DE 10227038 A1 20030626 DE 1027038 A 20020617 200341

Priority Applications (No Type Date): US 2001884661 A 20010619

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 20020194309	A1	15	G06F-015/16	
GB 2379533	A		G06F-017/30	
JP 2003131918	A	46	G06F-012/00	
DE 10227038	A1		G06F-017/30	

Device synchronization system in multimedia environment, updates user specific information stored in zone specific devices based on information stored in central storage /interface device

Abstract (Basic):

... The audio , video and photographic information specific to a user are stored digitally in central storage/interface device . Several zone specific storage/interface devices in various zones, are connected to the central device . The information in the zone specific devices , is updated based on information stored in the central device so that a user located in any zone, is enabled to access the updated information.

... An INDEPENDENT CLAIM is included for device synchronization method...

...For synchronizing multimedia recorders and players such as CD, DVD players, MP3 player, VCR connected to satellite/radio/microwave/cellular networks and used in car, boat, airplane, etc...

...Since updated user specific information is stored in zone specific devices in various zones, the user located at any zone is enabled to access the updated information, simply and easily...

...The figure shows a flowchart explaining the synchronizing , downloading and updating multimedia content from the master to subordinate digital multimedia devices .

Title Terms: DEVICE ;

International Patent Class (Main): G06F-012/00 ...



... G06F-015/16 ...

... G06F-017/30

International Patent Class (Additional): G06F-009/00 ...

... H04N-005/765 ...

... H04N-007/173

Manual Codes (EPI/S-X): T01-J05B4P ...

... T01-J07D1 ...

... T01-N01A2A ...

... T01-N01D1 ...

... T01-N02B1 ...

... T05-H05E ...

... T05-H08C ...

... W03-G08 ...

... W04-B10C ...

... W04-C10A1 ...

... W04-C10A2 ...

... W04-G01B8 ...

... W04-K10 ...

... W06-B01C7 ...

... W06-C01C9 ...

... X22-J13

52/3,K/25 (Item 16 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

014786720 \*\*Image available\*\*  
WPI Acc No: 2002-607426/200265  
XRPX Acc No: N02-481015

**Complementary data delivering for remote controlling of devices through network, involves transmitting audio data synchronized with video data to personal digital assistants and telephones through corresponding networks**

Patent Assignee: CLOUTIER J (CLOU-I); MILEWSKI A E (MILE-I); SMITH T M (SMIT-I)

Inventor: CLOUTIER J; MILEWSKI A E; SMITH T M

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 20020077117	A1	20020620	US 2000736430	A	20001215	200265 B

Priority Applications (No Type Date): US 2000736430 A 20001215

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

US 20020077117 A1 9 H04M-003/42

**Complementary data delivering for remote controlling of devices through network, involves transmitting audio data synchronized with video data to personal digital assistants and telephones through corresponding networks**

Abstract (Basic):

... A command is received through a telephone **network** for **synchronous transmission** of complementary data . The complementary data having **audio** and **video data** is **synchronously transmitted** to the receiving **devices** (120,130) such as PDA, telephone through **corresponding network** .

... 2) Telephone **controlling** method; and...

...3) **Appliances** **controlling** method...

...For delivering complementary data to remotely **control devices** through **network** e.g. public switched telephone **network** (PSTN) where voice mail **servers** are controlled by phones which are connected to the voice mail **servers** .

...Utilizes the flexibility of a mobile and/or handheld **device** such as PDA to **control** another **device** through the **network** . Facilitates the provision of **several** services as the PDA can be carried to different locations to **control** different **devices** for **synchronous transmission** of complementary data .

...Receiving **devices** (120,130

...Title Terms: **CONTROL** ;

International Patent Class (Main): **H04M-003/42**

Manual Codes (EPI/S-X): **T01-M06A1A0** ...

... **T01-N01D1** ...

... **T01-N02B1**

52/3,K/26 (Item 17 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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014624071 \*\*Image available\*\*  
WPI Acc No: 2002-444775/200247  
XRPX Acc No: N02-350388

**Synchronization of bulk data transfers to end node devices in  
multimedia network by sending initial schedule messages prior to  
broadcast of content**

Patent Assignee: NAVIC SYSTEMS INC (NAVI-N)  
Inventor: CAMERON K; FAGNANI M; HALL P; KAMENTSKY L; KANOJIA C; KILLER R;  
LACROIX J

Number of Countries: 024 Number of Patents: 003

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200245423	A1	20020606	WO 2001US45533	A	20011115	200247 B
US 20020122427	A1	20020905	US 2000253369	P	20001128	200260
			US 2001969530	A	20011002	
EP 1346571	A1	20030924	EP 2001990784	A	20011115	200363
			WO 2001US45533	A	20011115	

Priority Applications (No Type Date): US 2001969530 A 20011002; US  
2000253369 P 20001128

Patent Details:

Patent No	Kind	Lan	Pg	Main IPC	Filing Notes
WO 200245423	A1	E	55	H04N-007/10	
				Designated States (National):	CA JP MX
				Designated States (Regional):	AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE TR
US 20020122427	A1			H04L-012/28	Provisional application US 2000253369

EP 1346571 A1 E H04N-007/10 Based on patent WO 200245423  
Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LI  
LU MC NL PT SE TR

**Synchronization of bulk data transfers to end node devices in  
multimedia network by sending initial schedule messages prior to  
broadcast of content**

Abstract (Basic):

... 10) are connected to TV displays (20) and promotions (30) can be  
presented in various **multimedia** formats that may be **simultaneously**  
active in the **video** displays. The **multimedia** delivery system  
includes a promotional **server** subsystem (200) and a promotion agent  
subsystem for periodic **collection** of viewer usage data, I.e. history  
of channels watched and responses, while delivery is performed using a  
database **server** (210), a promotions **manager server** (220) and bulk  
data **servers** (230).

... **Synchronizing bulk data transfers to end node devices in  
multimedia network .**

...

...Promotional **server** subsystem (200...

...Database **server** (210...

...Promotions **manager server** (220...

...Bulk data **servers** (230

Title Terms: **SYNCHRONISATION** ;

International Patent Class (Main): H04L-012/28 ...

... H04N-007/10

...International Patent Class (Additional): H04N-007/025

Manual Codes (EPI/S-X): T01-N01D1 ...

... T01-N02A2B ...

... W02-F10H ...

... W03-A16C5

52/3,K/30 (Item 21 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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014116832 \*\*Image available\*\*  
WPI Acc No: 2001-601044/200168  
XRPX Acc No: N01-448278

**Computer system has queue storage and control logic unit concurrently transforming data between processor interface and memory controller, while transferring data between expansion bus interface and graphic bus interface**

Patent Assignee: COMPAQ COMPUTER CORP (COPQ )  
Inventor: CHIN K T; COFFEE C K; COLLINS M J; JOHNSON J J; JONES P M; LARSON J; LESTER R A; PICCIRILLO G J; STEVENS J C

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 6247102	B1	20010612	US 9847876	A	19980325	200168 B

Priority Applications (No Type Date): US 9847876 A 19980325

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
US 6247102	B1	33	G06F-013/14	

**Computer system has queue storage and control logic unit concurrently transforming data between processor interface and memory controller, while transferring data between expansion bus interface and graphic bus interface**

Abstract (Basic):

... A queue storage and **control** logic unit (104) coupling CPU interface (130), graphics bus interface (150), expansion bus interface (160) and memory controller (140) of interface apparatus, **transfers data** between CPU interface and memory controller, while **concurrently transferring data** between expansion bus interface and **graphic** bus interface.

... An INDEPENDENT CLAIM is also included for method for **concurrently** processing bus cycle information in a **computer** system  
...

... **Computer** system...

... Bus bridge of the **computer** system is capable of coupling **multiple** buses and attains high performance by allowing transaction between the buses to occur **concurrently**, thereby increasing overall system performance significantly...

... The figure shows the block diagram of bridge logic **unit** .  
...

... **Control** logic **unit** (104...

... CPU interface (130...

... Memory **controller** (140...

... **Graphic** bus interface (150

Title Terms: **COMPUTER** ;

International Patent Class (Main): G06F-013/14

Manual Codes (EPI/S-X): T01-H05B

52/3,K/32 (Item 23 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
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013556611 \*\*Image available\*\*  
WPI Acc No: 2001-040818/200105  
XRPX Acc No: N01-030466

Multimedia file distribution system for networked client server environment, transmits multimedia file to user simultaneously, based on transmission protocol and status information received from network

Patent Assignee: UNIFREE LLC (UNIF-N)

Inventor: REDMOND S D

Number of Countries: 021 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 200064111	A1	20001026	WO 2000US10126	A	20000414	200105 B

Priority Applications (No Type Date): US 99295000 A 19990416

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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WO 200064111	A1	E 45	H04L-012/64	
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Designated States (National): CA CN JP

Designated States (Regional): AT BE CH CY DE DK ES FI FR GB GR IE IT LU MC NL PT SE

Multimedia file distribution system for networked client server environment, transmits multimedia file to user simultaneously, based on transmission protocol and status information received from network

Abstract (Basic):

... File distribution server (12) receives transmission requests for selected multimedia file from the user, and transmission protocol of user system and status information from the network. Based on the received transmission protocol and status information, a multimedia file comprising precompressed and pre-encrypted multimedia data file, is transmitted to the user simultaneously.

... For less-than real time multimedia file distribution system e.g. video-on-demand (VOD) system, network based real-time streaming video system, for distributing audio files, still image and/or high resolution image file data e.g. X-ray, MRI, etc., in client-server system for high speed network communications e.g. ISDN, DSL cable modems, etc., and also for transmitting streaming video file data directly to user's television set or PC using internet communication protocols...

...Provides a looping file arrangement in which several client receive the same multimedia file on multiple network channel, without providing multiple copies of the same media file for each request of that file. Provides multiple-level encryption technology which permits the server to fully control both the access and use of given multimedia file. Permits multiple user access to the same multimedia file, thereby eliminating the need for multiple copies of single multimedia file...

...The figure shows the block diagram of multimedia file client/ server system...

...File distribution server (12...

...Title Terms: **SIMULTANEOUS** ;  
International Patent Class (Main): **H04L-012/64**

52/3,K/34 (Item 25 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

013518481 \*\*Image available\*\*  
WPI Acc No: 2001-002687/200101  
XRPX Acc No: N01-002288

Audio - video data recording -reproducing unit has multichannel  
input-output provisions that operate simultaneously with option to  
implement single channel inputs/outputs simultaneously over all  
modules

Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2000285549	A	20001013	JP 9988707	A	19990330	200101 B

Priority Applications (No Type Date): JP 9988707 A 19990330

Patent Details:

Patent No	Kind	Ln	Pg	Main IPC	Filing Notes
JP 2000285549	A		5	G11B-015/02	

Audio - video data recording -reproducing unit has multichannel  
input-output provisions that operate simultaneously with option to  
implement single channel inputs/outputs simultaneously over all  
modules

Abstract (Basic):

... The individual modules (22,24) handle multichannel  
record-reproduce operations simultaneously through the internal  
controllers (32,34). The controllers are coupled by the dual input  
RAM (26) that makes it feasible to record and reproduce single channel  
material simultaneously through both modules, with the content  
processors (40,42) coupled through a delay control circuit (56).  
... For recording and reproducing audio and video data...

...It constitutes an extremely flexible, versatile set- up capable of  
serving several clients simultaneously .

...The figure illustrates the case of two modules that are part of the  
centralized recording-reproducing unit .

...Individual modules (22,24...

...Internal controllers (32,34...

...Contents processors (40,42...

...Delay control circuit (56

Title Terms: AUDIO ;

International Patent Class (Main): G11B-015/02

Manual Codes (EPI/S-X): W04-K05



52/3,K/37 (Item 28 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

013070033 \*\*Image available\*\*  
WPI Acc No: 2000-241905/200021  
XRPX Acc No: N00-182013

Audio reproduction controller for CD system regenerates music disc  
from each CD synchronously which is then amplified

Patent Assignee: MORIMOTO T (MORI-I)  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2000057679	A	20000225	JP 98242526	A	1998081	200021 B

Priority Applications (No Type Date): JP 98242526 A 19980812

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2000057679	A	6	G11B-019/02	

Audio reproduction controller for CD system regenerates music disc  
from each CD synchronously which is then amplified

Abstract (Basic):

... Various music data is reproduced synchronously from several  
CD players (2). Each reproduction signal is amplified by separate  
amplifier (3). The amplified output...

... Synchronizing circuit synchronizes the timing of music  
output from set of players...

... Music is enjoyed according to user's desire, since music data is  
reproduced synchronously. Exclusive speaker is connected to each  
player, thereby real quality of vocal is reproduced...

...The figure shows block diagram of audio reproducing controller.

Title Terms: AUDIO ;

International Patent Class (Main): G11B-019/02

...Manual Codes (EPI/S-X): W04-E02A3 ...

... W04-R01E

52/3,K/38 (Item 29 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

013016456 \*\*Image available\*\*  
WPI Acc No: 2000-188307/200017  
XRPX Acc No: N00-139816

Control system of multi-channel acoustic and video signal transmitter,  
controls operation of multiplexer which multiplexes encoded acoustic and  
video signals while simultaneous data transmission is performed  
Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2000031934	A	20000128	JP 98196285	A	1998071	200017 B

Priority Applications (No Type Date): JP 98196285 A 19980710

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 2000031934	A	11	H04J-003/22	

Control system of multi-channel acoustic and video signal transmitter,  
controls operation of multiplexer which multiplexes encoded acoustic and  
video signals while simultaneous data transmission is performed  
...Abstract (Basic): NOVELTY - Several acoustic signal encoders (3,5,7)  
and video signal encoder (9) perform compression encoding of  
respective signals. The encoded signal is multiplexed by multiplexer  
(13). The operation of multiplexer is controlled by encoders (3,5,7)  
and transmission controller (12) while simultaneous data  
transmission is performed. DETAILED DESCRIPTION - An external data  
transmitting buffer (11) stores external control data from external  
apparatus...

...USE - For transmitting multichannel acoustic and video signal via  
transmission line...

...DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of  
multi-channel acoustic and video signal transmission apparatus.  
(3,5,7) Acoustic signal encoders; (9) Video signal encoder; (12)  
Transmission controller ; (13) Multiplexer .

Title Terms: CONTROL ;

...International Patent Class (Additional): H04N-007/08 ...

... H04N-007/081

Manual Codes (EPI/S-X): W02-K02 ...

... W03-A

52/3,K/42 (Item 33 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

012708499 \*\*Image available\*\*  
WPI Acc No: 1999-514608/199943  
XRPX Acc No: N99-384243

**Cable television CATV telephone system used in simultaneous audip  
broadcasts - has central installation which executes simultaneous  
audio broadcasts on each terminal equipment via internal and external  
audio buses regardless of operation of switching system**

Patent Assignee: MATSUSHITA DENKI SANGYO KK (MATU )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11225222	A	19990817	JP 9837983	A	19980205	199943 B

Priority Applications (No Type Date): JP 9837983 A 19980205

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 11225222	A	6	H04M-011/00	

**Cable television CATV telephone system used in simultaneous audio  
broadcasts...**

**...has central installation which executes simultaneous audio  
broadcasts on each terminal equipment via internal and external audio  
buses regardless of operation of switching system**

**...Abstract (Basic): NOVELTY - A central installation (2) receives a  
broadcast transmission demand transmitted from any one of the terminal  
equipments (3-8) connected to the installation via a bidirectional  
CATV network (1). The installation then executes simultaneous  
audio broadcasts on each terminal equipment via internal and  
external audio buses regardless of the operation of a switching  
system (21). DETAILED DESCRIPTION - The switching system forms a  
corresponding channel when speech communication between the central  
installation and the terminal equipments are executed. Internal  
audio buses transmit audio data within a master route center  
unit (23) and slave route center units (24,25), while external  
buses transmits audio data between the master and the slave  
route center units .**

**...USE - For simultaneous audio broadcasts...**

**...ADVANTAGE - Obtains stable, high-level audio broadcast service even  
when circuits contained within switching system breaks down.  
DESCRIPTION OF DRAWING(S) - The figure shows the component block  
diagram of the CATV telephone system. (1) Bidirectional CATV network ;  
(2) Central installation; (3-8) Terminal equipment ; (21) Switching  
system; (23) Master route center unit ; (24,25) Slave route  
center units .**

**...Title Terms: SIMULTANEOUS ;**

International Patent Class (Main): H04M-011/00

International Patent Class (Additional): H04H-001/08 ...

**... H04L-012/18 ...**

... H04M-003/00 ...

... H04M-003/42 ...

... H04N-007/16

...Manual Codes (EPI/S-X): W02-D01 ...

... W02-F05A

52/3,K/44 (Item 35 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

012488739 \*\*Image available\*\*  
WPI Acc No: 1999-294847/199925  
XRPX Acc No: N99-221424

Reproduction controller of multimedia disk drive - sets reproduction timing based on which data from disc and external device are regenerated synchronously

Patent Assignee: HITACHI LTD (HITA )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 11098467	A	19990409	JP 97255384	A	19970919	199925 B

Priority Applications (No Type Date): JP 97255384 A 19970919  
Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 11098467	A	17	H04N-005/93	

Reproduction controller of multimedia disk drive...

...sets reproduction timing based on which data from disc and external device are regenerated synchronously  
...Abstract (Basic): NOVELTY - The data retrieved from the external device (2) is stored in the memory of reproduction unit (3). The storage of external data is made in synchronize with data stored in the disk (1). During regeneration, both disk data and external media are regenerated synchronously as basic and additional data based on set timing. DETAILED DESCRIPTION - The retrieved data is output through an audio and view output unit. The accessing of data in the external device is performed, based on access indication...

...USE - For multimedia disk drive e.g. for CD-ROM, CD, CD-G, DVD .  
...

...ADVANTAGE - The synchronous regeneration of latest data received through internet is carried out, thereby reduces user's burden.  
DESCRIPTION OF DRAWING(S) - The figure shows the block diagram of reproduction controller. (1) Disk; (2) External device; (3) Reproduction unit.

...Title Terms: CONTROL ;  
International Patent Class (Main): H04N-005/93  
International Patent Class (Additional): H04N-005/85  
Manual Codes (EPI/S-X): W04-C10A ...  
... W04-F ...

... W04-F01

52/3,K/55 (Item 46 from file: 350)  
DIALOG(R) File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

011558824 \*\*Image available\*\*  
WPI Acc No: 1997-535305/199749  
XRPX Acc No: N97-445722

Computer system for real-time applications with multimedia devices coupled to expansion bus and multimedia bus - has 1st multimedia device for performing multimedia bus transfers simultaneously on data lines of both expansion bus and multimedia bus, in response to generating signals on bus indicating multiple bus transfer

Patent Assignee: ADVANCED MICRO DEVICES INC (ADMI )

Inventor: LAMBRECHT A

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
US 5682484	A	19971028	US 95559664	A	19951120	199749 B

Priority Applications (No Type Date): US 95559664 A 19951120

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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US 5682484	A	12	G06F-013/00	
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Computer system for real-time applications with multimedia devices coupled to expansion bus and multimedia bus...

...has 1st multimedia device for performing multimedia bus transfers simultaneously on data lines of both expansion bus and multimedia bus, in response to generating signals on bus indicating multiple bus transfer

...Abstract (Basic): bus, such as the PCI bus, and also includes a dedicated real-time bus or multimedia bus. Multimedia devices such as video cards, audio cards, etc., as well as communications devices, transfer real-time data through a separate bus without requiring arbitration for the PCI bus...

... Multimedia devices transmit addressing and control information for a multimedia bus transfer either over the PCI bus or using a separate serial control channel. The multimedia bus may also comprise separate multimedia channels for different data types. Periodic multimedia data is transferred over the multimedia bus...

...ADVANTAGE - Provides increased performance over current computer architectures. Computer system provides much greater performance for real-time applications than prior systems

Title Terms: COMPUTER ;

International Patent Class (Main): G06F-013/00

Manual Codes (EPI/S-X): T01-H05B4 ...

... T01-J30

52/3,K/63 (Item 54 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

010971553 \*\*Image available\*\*  
WPI Acc No: 1996-468502/199647  
XRPX Acc No: N96-394758

Music reproduction appts. for e.g. videoke - has image-reproduction unit equipped with several sets of reproduction appts. that performs changing of background drawing suitable to music information read by controller

Patent Assignee: VICTOR CO OF JAPAN (VICO )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 8234779	A	19960913	JP 9566853	A	19950228	199647 B

Priority Applications (No Type Date): JP 9566853 A 19950228

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
JP 8234779	A		9 G10K-015/04	

Music reproduction appts. for e.g. videoke - ...

...has image-reproduction unit equipped with several sets of reproduction appts. that performs changing of background drawing suitable to music information read by controller

...Abstract (Basic): The appts. (11) has a recording unit that records music information specified by an input unit (22). A lot of recording medium were recorded with image information that corresponds to music category for background drawing effect presentation. An image-reproduction unit equipped with several sets of reproduction appts. (11) is used for recording medium regeneration after a controller (17) reads the specified information...

...A reproduction unit (23) regenerates the music information read by the controller simultaneous with the image information reproduced by the image-reproduction unit .

...

...ADVANTAGE - Enables changing of background drawing appropriate to reproduced music due to several sets of reproduction appts. Shortens time in reproducing background drawing and music requesting

Title Terms: MUSIC ;

...International Patent Class (Additional): G10H-001/00 ...

... G11B-027/34 ...

... H04N-005/93

Manual Codes (EPI/S-X): W04-J03 ...

... W04-X03A3

52/3,K/65 (Item 56 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

010890006 \*\*Image available\*\*  
WPI Acc No: 1996-386957/199639  
XRPX Acc No: N96-326122

Multilingual television transmission system for dial-up television - has  
number of different language sound and text tracks which are transmitted  
in parallel or multiplexed with video frames with user selecting  
appropriate language with simultaneous recording of programmes

Patent Assignee: MALIK G S J (MALI-I)

Inventor: MALIK G S J

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
GB 2298544	A	19960904	GB 954342	A	19950303	199639 B

Priority Applications (No Type Date): GB 954342 A 19950303

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
GB 2298544	A	14	H04N-005/60	

... has number of different language sound and text tracks which are  
transmitted in parallel or multiplexed with video frames with user  
selecting appropriate language with simultaneous recording of  
programmes

...Abstract (Basic): The system includes at least one control channel for  
transmission of control data, with multilingual text channels and  
multilingual sound tracks synchronised with the picture frames in  
independent channels. The number of channels for control, sound and  
text can be varied, interchanged and altered temporarily and  
permanently on a real-time basis to accommodate different conditions. A  
dedicated channel is leased from a satellite television network,  
cable television network, mobile telephone network or optical cable  
network for the transmission of a specific programme...

...the current frames, with the user interacting with the television system  
through switches or remote control. The user chooses from a menu on  
the screen, with choices stored for subsequent use w.r.t. time,  
channel or programme...

...ADVANTAGE - Allows use of connected networked system with shared  
system resources e.g. for users living in flats. Can be incorporated  
into dedicated IC board which is easily installed into existing  
equipment. Allows users to upgrade or change systems with IC board  
portable for use when travelling. Allows recording of programmes with  
appropriate language track...

...Title Terms: MULTIPLEX ;

International Patent Class (Main): H04N-005/60

International Patent Class (Additional): H04N-005/92

Manual Codes (EPI/S-X): T01-J08A ...

... W02-F06B5 ...

... W03-A03C1



52/3,K/81 (Item 72 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

008226258 \*\*Image available\*\*  
WPI Acc No: 1990-113259/199015

Video recording system for VTR - includes several video regenerators  
having common primary controller to operate regeneration  
simultaneously NoAbstract Dwg 1/12  
Patent Assignee: SONY CORP (SONY )  
Number of Countries: 001 Number of Patents: 001  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
JP 2065597	A	19900306	JP 88217737	A	19880831	199015 B

Priority Applications (No Type Date): JP 88217737 A 19880831

Video recording system for VTR...

...includes several video regenerators having common primary  
controller to operate regeneration simultaneously NoAbstract Dwg  
1/12

Title Terms: VIDEO ;

International Patent Class (Additional): G11B-015/02 ...

... H04N-013/00

Manual Codes (EPI/S-X): W04-B01 ...

... W04-B10 ...

... W04-F01 ...

... W04-K ...

... W04-P01C

52/3,K/87 (Item 78 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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007704909 \*\*Image available\*\*  
WPI Acc No: 1988-338841/198848  
XRPX Acc No: N88-256893

**Coupling of vertical synchronising signals for TV studio - using LAN network for data transmission based upon video signals synchronised to clock signals**

Patent Assignee: BTS BROADCAST TELEV (BTSB-N)  
Inventor: GLAAB F; RITTER U; STURM R  
Number of Countries: 003 Number of Patents: 004  
Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
DE 3715595	A	19881124	DE 3715595	A	19870509	198848 B
FR 2615059	A	19881110	FR 884609	A	19880407	198901
US 4951142	A	19900821	US 88188420	A	19880429	199036
DE 3715595	C	19920213				199207

Priority Applications (No Type Date): DE 3715595 A 19870509

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
DE 3715595	A	4		

**Coupling of vertical synchronising signals for TV studio...**

**...using LAN network for data transmission based upon video signals synchronised to clock signals**

**...Abstract (Basic):** A local area network ( LAN ) is used for communication between a number of control computers within a television studio. The system has a central processing unit (7), command module (8), servo system for film transport (8), video processor (10) and colour correction unit (11). Each of the units has an associated computer (12-16...

**...Communication between the units** is made over the LAN network which has receiver/transmitter units (1-5) connected by cable providing a serial data bus. Transmissions are synchronised by counting clock cycles...

**...Abstract (Equivalent):** A local area network communicator system is used to couple the units of a television studio system, such as a film scanning system. The system has a CPU (7), operator console (8), servis circuit (9) for film transport, a video processor (10) and colour correction unit + (11). The colour corrector unit is only intended to change values during the vertical frequency pulse intervals in order to avoid visible noise of the reproduction. This is achieved by counting the vertical synchronising signal clock pulses of the processor using a counter (19) and generating a reference signal. ADVANTAGE - Allows network units to be synchronised. (4pp)

**...Abstract (Equivalent):** In order to couple together vertical-frequency synchronization signals generated by a computer connected to an data transmission system, the synchronization signals are generated by counting the clock pulses...

**...A reference signal is transmitted to the computer or processor ;** the reference has a frequency which -is a whole-number fraction of the desired frequency. Upon receipt in the processor (16) of the reference signal, a counter (19) provided for counting of the clock pulses is preset. ADVANTAGE - Obviates need for supplementary

synchronisation signal corrections in broadcasting studio  
installation .

(

...Title Terms: SYNCHRONISATION ;

International Patent Class (Additional): H04L-007/00 ...

... H04N-005/07

Manual Codes (EPI/S-X): T01-H05 ...

... T01-H07 ...

... T01-K ...

... W04-M09 ...

... W04-N

52/3,K/89 (Item 80 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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007557806

WPI Acc No: 1988-191738/198828

XRPX Acc No: N88-146641

Computer **human interface for** digital data processing - updates  
**multiple pictures simultaneously and windows can be moved around on**  
**screen and sizes can be changes**

Patent Assignee: COMPUTER X INC (COMP-N); MOTOROLA INC (MOTI )

Inventor: KOLNICK F C

Number of Countries: 005 Number of Patents: 005

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
EP 274087	A	19880713	EP 87118487	A	19871214	198828 B
US 5062060	A	19911029	US 89355092	A	19890517	199146
CA 1297995	C	19920324				199218
US 5335323	A	19940802	US 87620	A	19870105	199430
			US 91689113	A	19910422	
			US 92982401	A	19921127	
US 5502839	A	19960326	US 87619	A	19870105	199618
			US 89361738	A	19890602	

Priority Applications (No Type Date): US 87626 A 19870105; US 87619 A  
19870105; US 87620 A 19870105; US 87625 A 19870105; US 89355092 A  
19890517; US 91689113 A 19910422; US 92982401 A 19921127; US 89361738 A  
19890602

Patent Details:

Patent No Kind Lan Pg Main IPC Filing Notes

EP 274087 A E 30

Designated States (Regional): DE FR GB

US 5335323 A 67 G06F-015/40 Cont of application US 87620

Cont of application US 91689113

US 5502839 A 123 G06F-013/00 Cont of application US 87619

Computer **human interface for** digital data processing - ...

... updates **multiple pictures simultaneously and windows can be moved**  
**around on screen and sizes can be changes**

...Abstract (Basic): In the **computer** human interface an adjustable window  
enables the user to view an abstract **device** independent **picture**  
description of information: Each window can be sized independently  
regardless of applications running on them. The **pictures** are  
completely independent of each other. **Multiple pictures** (170,174)  
can be **updated simultaneously** and windows can be moved around on  
the screen and their sizes changed without the involvement of other  
windows and/or **pictures** .

...

...including windows, representing portions of any or all of the  
applications can be displayed and **updated** on the output **device**  
**simultaneously** and independently of one another. All human interface  
is performed through virtual input/output **devices** (186, 187

...Abstract (Equivalent): A virtual input interface in a **data processing**  
system, said interface comprising...

...means for accepting input from at least one physical **device** and for  
converting said physical **device** input into virtual input, said means

comprising a virtual input **manager** process responsive to said at least one physical input **device** for generating a **picture**, said **picture** comprising one or more **picture** elements, each **picture** element comprising a plurality of **device** -independent data structures in a predetermined, standard data format, at least one of said data structures comprising a plurality of different data fields each containing information describing said **picture** element; and...

...virtual input for performing processing operations upon said virtual input, said means comprising a console **manager** process for performing processing operations on said one or more **picture** elements...

...In a **computer** human interface an adjustable "window" enables the user to view a portion of an abstract, **device** -independent "**picture**" description of information. **More** than **one** window can be opened at a time. Each window can be sized independently of another...

...them. The human interface creates a separate "object" (represented by a process) for each active **picture** and for each active window. The **pictures** are completely independent of each other. That is, none is aware of the existence of any other, and any **picture** can be **updated** without reference to, and without affect upon, any other. The same is true of windows...

...represented by two objects, a window (distinguished by its frame title, icons, etc) and a **picture** which is (partially) visible within the boundaries of the windows frame. ADVANTAGE - **Multiple pictures** can be up-dated **simultaneously**. Windows can be moved around screen and their sizes changed...

Title Terms: **COMPUTER** ;

International Patent Class (Main): **G06F-013/00** ...

... **G06F-015/40**

International Patent Class (Additional): **G06F-003/03**

Manual Codes (EPI/S-X): **T01-C02B1** ...

... **T01-J**

52/3,K/93 (Item 84 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
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004815642  
WPI Acc No: 1986-318983/198648  
XRPX Acc No: N86-238150

Simultaneous display of number of picture data method - producing  
display by storing each picture data in memory and reading them onto  
multi-screen

Patent Assignee: ISS KK (ISSI-N); SATO N (SATO-I)

Inventor: SATO N

Number of Countries: 011 Number of Patents: 004

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
WO 8606912	A	19861120	WO 86JP238	A	19860508	198648 B
JP 61255188	A	19861112	JP 8596075	A	19850508	198652
EP 222920	A	19870527	EP 86902910	A	19860508	198721
CN 8605983	A	19880323				198919

Priority Applications (No Type Date): JP 8596075 A 19850508

Patent Details:

Patent No	Kind	Lan Pg	Main IPC	Filing Notes
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WO 8606912	A	J 17		
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Designated States (National): KR US

Designated States (Regional): CH DE FR GB IT NL

EP 222920	A	E		
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Designated States (Regional): CH DE FR GB IT LI NL

Simultaneous display of number of picture data method...

...producing display by storing each picture data in memory and reading  
them onto multi-screen

...Abstract (Basic): In a videotex communication network , picture  
data is divided into a number of data and stored in the memory of the  
systems main computers . Each picture data file is read from a  
terminal computer , which stores multiple of files and displays them  
at the same time onto a CRT display. For this purpose, a terminal  
is provided with a computer , an A- picture memory an interface a set  
of B- picture memories and a CRT display...

...When each picture file is received by the A-memory, it is processed  
and stored in one of B-memories. The stored data are displayed  
simultaneously on a screen...

...USE/ADVANTAGE - Promotional or educational purposes. Simultaneous  
display of various combinations of pictures is possible. (17pp  
Dwg.No.1/7)

Title Terms: SIMULTANEOUS ;

International Patent Class (Additional): H04M-011/06 ...

... H04N-001/23 ...

... H04N-007/17

Manual Codes (EPI/S-X): T01-J05 ...

... W02-F05 ...

... W04-W09

52/3,K/100 (Item 91 from file: 350)  
DIALOG(R)File 350:Derwent WPIX  
(c) 2005 Thomson Derwent. All rts. reserv.

001299136

WPI Acc No: 1975-J3053W/197533

Graphic display computer system - peripheral operating positions  
repeat data contained in central memory and processor

Patent Assignee: WESTERN ELECTRIC CO INC (AMTT )

Number of Countries: 001 Number of Patents: 001

Patent Family:

Patent No	Kind	Date	Applicat No	Kind	Date	Week
NL 146619	B	19750715				197533 B

Priority Applications (No Type Date): US 67682280 A 19671113

Graphic display computer system...

...peripheral operating positions repeat data contained in central memory  
and processor

...Abstract (Basic): A computer set with graphic display having one or more local operating positions with a local compute and a memory for recording blocks of graphic and programme data together with a display unit for graphical display; and with a central computer in time multiplex connection with the local station. The memory (103, 107) of the central computer (101) retains data equivalent to that record at the peripheral stations (120), the equivalence being effected by identification signals assuring the same operation by the local computer (130) and the central computer (101) by a central process (102). Synchronisation in processing is maintained by a set of synchronising signals together with periodic updating signals to ensure that the graphic display at each operation position corresponds with the state of the central processor .

Title Terms: GRAPHIC ;

International Patent Class (Additional): G06F-003/14

Set	Items	Description
S1	229031	AUDIO? OR VOICE? OR SOUND? OR MUSIC? OR SONG? OR ACOUSTIC? OR JUKEBOX?
S2	329239	VIDEO? OR VTR OR VCR OR PHOTOGRAPH? OR GRAPHIC? OR PICTUR? OR PICTOR? OR STILL()IMAGE? OR MOVIE? OR (MOTION? OR MOVING) (- )IMAGE?
S3	103801	TV OR TELEVISION? OR MPEG OR JPEG
S4	73375	DVD OR DVDS OR DIGITAL?() (CONTENT? OR DATA OR INFO OR INFO- RMATION?) OR DIGITAL?() (VIDEO OR VERSATIL?) () (DISC? OR DISK?)
S5	29901	MULTIMEDIA? OR MULTI()MEDIA?
S6	1539714	DEVICE? OR UNIT? ? OR MODULE? ? OR APPLIANCE? OR EQUIPMENT? OR SERVER?
S7	483447	CONTROLLER? OR COMPUTER? OR CPU OR CPUS
S8	258270	CENTRAL()PROCESS? OR PROCESSOR? OR MICRO()PROCESS? OR DATA- ( )PROCESS? OR MICROCOMPUTER? OR WORKSTATION? OR WORK()STATION?
S9	1031280	CHIEF? OR MAIN OR MANAGER? OR MANAGING? OR MASTER? OR CENT- ER? OR CENTRAL? OR COMMAND
S10	1174154	HUB OR HUBS OR PRIMARY OR PRINCIPAL OR CONTROLLER? OR CONT- ROLLING? OR CONTROL
S11	1207450	MULTIP? OR MULTIT? OR SEVERAL? OR NUMEROUS? OR MORE(2W)ONE OR TWO(2W)MORE OR ASSEMBLY? OR ASSEMBLIE?
S12	397844	COLLECTION? OR NETWORK? OR LAN OR WAN OR LANS OR WANS OR I- NTERNET? OR ETHERNET? OR EXTRANET?
S13	526021	ONLINE? OR INTRANET? OR COMMUNICAT?()SYSTEM? OR WAP OR WAPS OR LIBRAR? OR ARCHIV? OR VARIET?
S14	600795	SYNCHRON? OR SYNCRON? OR COINCID? OR SIMULTAN? OR (RENDER? OR MAKE? OR MAKING OR MADE) ()IDENTICAL? OR IDENTICALIZ? OR ID- ENTICALIS? OR RESYNCRON? OR RESYNCHRON?
S15	395174	("SAME" OR IDENTIC? OR SIMILAR?) ()TIME? ? OR SYNC?? OR SYN- K?? OR CONTEMPORAN? OR CONCURREN? OR COOCCURR? OR CO()OCCUR?
S16	282535	UPDAT? OR UP(2W)DATE OR RESET? OR REFRESH? OR RELOAD? OR R- ESTOR? OR RENEW? OR REENABL?
S17	164717	PATCH? OR UPGRAD? OR FIXUP? OR REGENERAT? OR REPLENISH? OR REVITAL? OR REJUVENAT?
S18	379262	DOWNLOAD? OR DOWN()LOAD? OR UPLOAD? OR UP()LOAD? OR INSTAL- L? OR (DOWN OR UP) ()LINK? OR DOWNLINK? OR UPLINK?
S19	745995	RETRIEV? OR STORE? OR STORING? OR STORAG? OR RECORDING?
S20	175913	(DATA OR FILE? OR RECORD?) (3N) (TRANSFER? OR TRANSMI? OR OF- FLOOD? OR UNLOAD? OR FEED? OR FLOW?)
S21	982	ARQPRO OR ARQ()PRO OR AUDIOREQUEST()PRO OR AUDIO()REQUEST (- )PRO OR AMX OR REQUEST() (MULTIMEDIA OR MULTI()MEDIA)
S22	370908	IC=(G06? OR H04N? OR H04L? OR G09B? OR G10H? OR G06T? OR H- 04H? OR G11B? OR H04M?)
S23	80616	((S1(10N)S2) OR S3:S5) (10N)S6:S8
S24	494	S21 AND S14:S15
S25	32	S24 AND S14:S15(7N)S16:S20
S26	41673	S23 AND S9:S10(5N)S6:S8 AND S11:S13(5N)S6:S8
S27	7593	S26 AND S14:S15(7N)S16:S20
S28	4498	S27 AND S16:S20(5N) (S1(10N)S2 OR S3:S5)
S29	632	S28 AND S16:S17(5N) (S1(10N)S2 OR S3:S5)
S30	552	S29 AND S18:S20(5N) (S1(10N)S2 OR S3:S5)
S31	500	S30 AND S22
S32	23	S29:S31 AND S14:S15/TI
S33	752341	AD=2002:2005
S34	366	S31 NOT S33
S35	100	S34 AND ((S1 AND S2) OR (S3:S5))/TI
S36	55	S25 OR S32
S37	151	S35:S36
S38	137	S37 NOT S33
S39	137	IDPAT (sorted in duplicate/non-duplicate order)

? show files



File 348:EUROPEAN PATENTS 1978-2005/Jul W02

(c) 2005 European Patent Office

File 349:PCT FULLTEXT 1979-2005/UB=20050714,UT=20050707

(c) 2005 WIPO/Univentio

?

Set	Items	Description
S1	1377457	AUDIO? OR VOICE? OR SOUND? OR MUSIC? OR SONG? OR ACOUSTIC? OR JUKEBOX?
S2	1460234	VIDEO? OR VTR OR VCR OR PHOTOGRAPH? OR GRAPHIC? OR PICTUR? OR PICTOR? OR STILL()IMAGE? OR MOVIE? OR (MOTION? OR MOVING) (- )IMAGE?
S3	388856	TV OR TELEVISION? OR MPEG OR JPEG
S4	45276	DVD OR DVDS OR DIGITAL?() (CONTENT? OR DATA OR INFO OR INFO- RMATION?) OR DIGITAL?() (VIDEO OR VERSATIL?) () (DISC? OR DISK? - OR RECORDER?) OR DVR OR DVRS
S5	179748	MULTIMEDIA? OR MULTI()MEDIA?
S6	6550796	DEVICE? OR UNIT? ? OR MODULE? ? OR APPLIANCE? OR EQUIPMENT? OR SERVER? OR TERMINAL? ? OR STATION? ?
S7	4683833	CONTROLLER? OR COMPUTER? OR CPU OR CPUS
S8	884393	CENTRAL()PROCESS? OR PROCESSOR? OR MICRO()PROCESS? OR DATA- ( )PROCESS? OR MICROCOMPUTER? OR WORKSTATION? OR WORK()STATION?
S9	6000364	CHIEF? OR MAIN OR MANAGER? OR MANAGING? OR MASTER? OR CENT- ER? OR CENTRAL? OR COMMAND OR BASE
S10	7018716	HUB OR HUBS OR PRIMARY OR PRINCIPAL OR CONTROLLER? OR CONT- ROLLING? OR CONTROL
S11	5393958	MULTIP? OR MULTIT? OR SEVERAL? OR NUMEROUS? OR MORE(2W)ONE OR TWO(2W)MORE OR ASSEMBLY? OR ASSEMBLIE?
S12	2881600	COLLECTION? OR NETWORK? OR LAN OR WAN OR LANS OR WANS OR I- NTERNET? OR ETHERNET? OR EXTRANET?
S13	1840050	ONLINE? OR INTRANET? OR COMMUNICAT?()SYSTEM? OR WAP OR WAPS OR LIBRAR? OR ARCHIV? OR VARIET?
S14	1364387	SYNCHRON? OR SYNCRON? OR COINCID? OR SIMULTAN? OR (RENDER? OR MAKE? OR MAKING OR MADE) ()IDENTICAL? OR IDENTICALIZ? OR ID- ENTICALIS? OR RESYNCRON? OR RESYNCHRON?
S15	434214	("SAME" OR IDENTIC? OR SIMILAR?) ()TIME? ? OR SYNC?? OR SYN- K?? OR CONTEMPORAN? OR CONCURREN? OR COOCCURR? OR CO()OCCUR?
S16	1534157	UPDAT? OR UP(2W)DATE OR RESET? OR REFRESH? OR RELOAD? OR R- ESTOR? OR RENEW? OR REENABL? OR EDIT?? OR EDITING
S17	578209	PATCH? OR UPGRAD? OR FIXUP? OR REGENERAT? OR REPLENISH? OR REVITAL? OR REJUVENAT?
S18	578756	DOWNLOAD? OR DOWN()LOAD? OR UPLOAD? OR UP()LOAD? OR INSTAL- L? OR (DOWN OR UP) ()LINK? OR DOWNLINK? OR UPLINK?
S19	1918872	RETRIEV? OR STORE? OR STORING? OR STORAG? OR RECORDING?
S20	275963	(DATA OR FILE? OR RECORD?) (3N) (TRANSFER? OR TRANSMI? OR OF- FLOAD? OR UNLOAD? OR FEED? OR FLOW?)
S21	740	ARQPRO OR ARQ()PRO OR AUDIOREQUEST()PRO OR AUDIO()REQUEST(- )PRO OR AMX OR REQUEST() (MULTIMEDIA OR MULTI()MEDIA)
S22	14	S21 AND S14:S15
S23	632905	(S1(10N)S2) OR S3:S5
S24	248259	S23 AND S6:S8
S25	17925	S24 AND S14:S15
S26	1768	S25 AND S16:S20(7N)S14:S15
S27	221	S26 AND S16:S17 AND S18:S20
S28	500	S26 AND S9:S10 AND S11:S13
S29	67	S27 AND S28
S30	654	S27:S28
S31	35	S30 AND S16:S17(7N)S14:S15 AND S18:S20(7N)S14:S15
S32	102	S30 AND S9:S10(7N)S6:S8 AND S11:S13(7N)S6:S8
S33	196	S22 OR S29 OR S31 OR S32
S34	162	S33 AND PY<2002
S35	135	RD (unique items)

? show files

File 2:INSPEC 1969-2005/Jul W2

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File 6:NTIS 1964-2005/Jul W2

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(c) 2005 The HW Wilson Co.  
File 111: TGG Natl. Newspaper Index(SM) 1979-2005/Jul 21  
(c) 2005 The Gale Group  
File 144: Pascal 1973-2005/Jul W2  
(c) 2005 INIST/CNRS  
File 256: TecInfoSource 82-2005/Jun  
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35/3,K/6 (Item 6 from file: 2)  
DIALOG(R)File 2:INSPEC  
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6288637 INSPEC Abstract Number: C1999-08-6160M-008

**Title:** Synchronous control for retrieval of data with Java in distributed multimedia databases

Author(s): Wada, M.; Komatsu, N.; Komiya, K.; Ikeda, H.

Author Affiliation: Atsugi Res. Centre, Telecommun. Adv. Organ. of Japan, Kanagawa, Japan

Conference Title: ICCT'98. 1998 International Conference on Communication Technology. Proceedings (IEEE Cat. No.98EX243) Part vol.1 p.557-63 vol.1

Editor(s): Chunpei, X.

Publisher: Publishing House of Constr. Mater, Beijing, China

Publication Date: 1998 Country of Publication: China 2 vol.787+832 pp.

ISBN: 7 80090 827 5 Material Identity Number: XX-1998-03564

Conference Title: ICCT'98. 1998 International Conference on Communication Technology. Proceedings

Conference Sponsor: China Inst Commun. (CIC); Chinese Inst. Electron. (CIE); IEEE Commun. Soc. (IEEE COMSOC)

Conference Date: 22-24 Oct. 1998 Conference Location: Beijing, China

Language: English

Subfile: C

Copyright 1999, IEE

**Title:** Synchronous control for retrieval of data with Java in distributed multimedia databases

Abstract: Owing to advances in **networking**, infrastructures necessary for the use of distributed **multimedia** databases are being realized, and they establish the environment to set up practical **multimedia** databases. This paper points out the necessities of **synchronous control** at the **terminals** used for **retrieving** data from distributed **multimedia** databases, and also points out the usefulness of Java in the **synchronous control** of the data to be displayed, from the viewpoint of language specifications. With a Java-based experimental system, this paper discusses the effect of **multithreading** on the system throughput viewing from these **terminals**, and the **synchronous control** of the content data on the displays. Finally, this paper shows that Java is optimum for **synchronous control** of the **retrieval terminal**. We also show that the state of the **synchronous control** can be simply verified, in the form which the eyes can see, by the trace...

...Descriptors: **multimedia** databases

Identifiers: **synchronous control**; ...

...distributed **multimedia** databases...

... **networking** ; ...

... **multithreading** ;

1998

35/3,K/7 (Item 7 from file: 2)  
DIALOG(R) File 2:INSPEC  
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6275697 INSPEC Abstract Number: B1999-07-6150M-070, C1999-07-5640-054  
Title: **TUTMAC: a medium access control protocol for a new multimedia wireless local area network**  
Author(s): Hannikainen, M.; Knuutila, J.; Letonsaari, A.; Hamalainen, T.; Jokela, J.; Ala-Laurila, J.; Saarinen, J.  
Author Affiliation: Signal Process. Lab., Tampere Univ. of Technol., Finland  
Conference Title: Ninth IEEE International Symposium on Personal, Indoor and Mobile Radio Communications (Cat. No.98TH8361) Part vol.2 p.592-6 vol.2  
Publisher: IEEE, New York, NY, USA  
Publication Date: 1998 Country of Publication: USA 3 vol. 1574 pp.  
ISBN: 0 7803 4872 9 Material Identity Number: XX-1998-03094  
U.S. Copyright Clearance Center Code: 0 7803 4872 9/98/\$10.00  
Conference Title: Proceedings of Ninth International Symposium on Personal, Indoor, and Mobile Radio Communications (PIMRC'98)  
Conference Sponsor: Worcester Polytech. Inst.; Nokia; Bell Atlantic Mobile; CWINS; Analog Devices; IEEE; IEEE Commun. Soc.; IEE; IEICE; GTE Lab  
Conference Date: 8-11 Sept. 1998 Conference Location: Boston, MA, USA  
Language: English  
Subfile: B C  
Copyright 1999, IEE

Title: **TUTMAC: a medium access control protocol for a new multimedia wireless local area network**

Abstract: This paper presents a medium access control (MAC) protocol called TUTMAC for a new wireless local area network (TUTWLAN). The design objective has been to develop a simple, multimedia service capable protocol that provides sufficient medium utilisation efficiency and guarantees QoS (quality of service) parameters. The developed system utilises a centralised (base station controlled) network architecture. A limited number of portable stations can be associated with the same base station, i.e. in the same TUTWLAN cell. TUTMAC is connection oriented: the bandwidth is allocated deploying constant bit-rate TDMA based data channels that are reserved by exchanging short control messages. The connection parameters can be dynamically altered during the data exchange session. Currently, a TUTWLAN prototype is being developed comprising both TUTMAC software and platform hardware modules. The prototype will support up to eight simultaneous data - transfer connections each having 64 to 512 kbit/s data transmission bandwidth.

...Descriptors: **multimedia** communication...

...time division **multiple** access...

...wireless **LAN**

Identifiers: medium access **control** protocol...

... **multimedia** wireless local area **network** ; ...

... **multimedia** service capable protocol...

... **centralised** **network** architecture...

... **base station** controlled **network** architecture...

...portable **stations** ; ...

... control messages  
1998

35/3,K/11 (Item 11 from file: 2)

DIALOG(R)File 2:INSPEC

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5627146 INSPEC Abstract Number: B9708-6210R-017, C9708-6130M-026

**Title:** Multimedia platforms and applications integrating groupware with video-on-demand

Author(s): Fukuoka, H.; Mizuno, H.; Kawasaki, S.

Author Affiliation: C&C Res. Labs., NEC Corp., Japan

Journal: NEC Research and Development vol.38, no.2 p.262-9

Publisher: NEC Creative,

Publication Date: April 1997 Country of Publication: Japan

CODEN: NECRAU ISSN: 0547-051X

SICI: 0547-051X(199704)38:2L.262:MPAI;1-W

Material Identity Number: N043-97003

Language: English

Subfile: B C

Copyright 1997, IEE

**Title:** Multimedia platforms and applications integrating groupware with video-on-demand

**Abstract:** Multimedia platforms and applications integrating groupware with video-on-demand are described. The integrated platform is achieved by association of a groupware **server** with a video-on-demand **server** using a Video Service Bridge (VSB). The platform enables application developers to develop **multimedia** application systems supporting both groupware and video-on-demand functions, and provides both real-time and **stored video** naturally **synchronized** with **audio** to group users **simultaneously**. A collaborative automobile sales support system and a group hypermedia navigational system developed on the...

... platform are interesting examples showing the platform's possibilities. Using these systems, group users can **simultaneously** share and operate video images **retrieved** from video **servers**.

...Descriptors: interactive **television** ; ...

... **multimedia** communication...

... **multimedia** computing...

... **network servers** ;

Identifiers: **multimedia** platforms...

... **multimedia** -on-demand...

... **multimedia** groupware...

...groupware **server** ; ...

... **multimedia** application systems...

...naturally **synchronized** ; ...

...video **servers** ; ...

... **multipoint control unit** ;

1997

35/3,K/12 (Item 12 from file: 2)

DIALOG(R)File 2:INSPEC

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5404830 INSPEC Abstract Number: B9612-6210R-012, C9612-6130M-019

**Title: On storage server issues for multimedia -on-demand systems**

Author(s): Ngoh, L.H.; Pan, H.; Reddy, V.

Author Affiliation: Inst. of Syst. Sci., Nat. Univ. of Singapore, Singapore

Conference Title: Multimedia Modeling. Towards Information Superhighway  
p.393-409

Editor(s): Chua, T.S.; Pung, H.K.; Lunii, T.L.

Publisher: World Scientific, Singapore

Publication Date: 1995 Country of Publication: Singapore ix+428 pp.

ISBN: 981 02 2502 4 Material Identity Number: XX95-02107

Conference Title: Proceedings of International Conference on Multimedia Modeling

Conference Date: 14-17 Nov. 1995 Conference Location: Singapore

Language: English

Subfile: B C

Copyright 1996, IEE

**Title: On storage server issues for multimedia -on-demand systems**

Abstract: In this paper, the various research and design issues of a storage **server** in the context of a **multimedia** -on-demand (MOD) system are explored. Using the research prototype currently being developed by the ...

... of various disk systems which can be used to form the basis of the storage **server**. Next we present a producer-consumer based dynamic disk scheduling scheme to **retrieve multiple** data streams **simultaneously** and deposit the data in the buffer memory of the MOD **server** for delivery to the respective clients. We show experimentally that the dynamic nature of the...

... algorithms which have been proposed elsewhere. We further demonstrate how by using the concepts of "**multimedia** capacity region" (MCR) the QoS-guaranteed service "capacity" of the storage **server** can be determined for admission **control** purposes. Finally the overall design of a typical MOD storage **server** and the various **multimedia** information browsing techniques are discussed.

...Descriptors: interactive **television** ; ...

... **multimedia** communication...

... **multimedia** computing...

... **network servers** ; ...

...telecommunication congestion **control** ;

Identifiers: storage **server** issues...

... **multimedia** -on-demand systems...

... **multiple** data streams...

... **multimedia** capacity region...

...admission **control** purposes...



... multimedia information browsing techniques  
1995

35/3,K/14 (Item 14 from file: 2)

DIALOG(R)File 2:INSPEC

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5266639 INSPEC Abstract Number: B9606-6210R-088, C9606-3370Z-003

**Title: Performance measurement of a stored media synchronization mechanism: graceful recovery scheme**

Author(s): Ishibashi, Y.; Minami, E.; Tasaka, S.

Author Affiliation: Dept. of Electr. & Comput. Eng., Nagoya Inst. of Technol., Japan

Journal: IEICE Transactions on Communications vol.E79-B, no.3 p. 399-411

Publisher: Inst. Electron. Inf. & Commun. Eng,

Publication Date: March 1996 Country of Publication: Japan

CODEN: ITCMEZ ISSN: 0916-8516

SICI: 0916-8516(199603)E79B:3L:399:PMSM;1-L

Material Identity Number: P711-96005

Language: English

Subfile: B C

Copyright 1996, IEE

**Title: Performance measurement of a stored media synchronization mechanism: graceful recovery scheme**

**Abstract:** This paper reports experimental results of a media **synchronization** mechanism which was proposed by the authors, focusing on the graceful recovery scheme. The proposed method consists of intra-stream and inter-stream **synchronization** mechanisms. The inter-stream **synchronization control** is performed after the intra-stream **synchronization control** over each media unit (MU) such as a video frame. Then, whether the intra-stream **synchronization** is still maintained or not is checked. In the experimental system, **video** and **voice** stored in a source **workstation** are transferred to a destination **workstation** via an **FDDI network**, and then they are **synchronized** and outputted at the destination (i.e. lip- **synchronisation**). At the transmission of each MU, we simulate **network** delay jitters by generating a pseudo-delay which is exponentially distributed. Using the system, we...

... and average MU rate or by subjective assessment. Furthermore, we demonstrate that the intra-stream **synchronization control** for each stream in addition to the inter-stream **control** is necessary for high quality **synchronization**.

...Descriptors: **multimedia** communication...

... **synchronisation** ; ...

...telecommunication **control** ;

...Identifiers: media **synchronization** mechanism...

...intra-stream **synchronization** ; ...

...inter-stream **synchronization** ; ...

... **control** ; ...

...media **unit** ; ...

... **multimedia** traffic...

...digital **network** ; ...

... **network** delay jitter

1996

35/3,K/17 (Item 17 from file: 2)

DIALOG(R)File 2:INSPEC

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5034113 INSPEC Abstract Number: C9510-6160S-007

**Title: Content-based inter-media synchronization**

Author(s): Dong-Young Oh; SampathKumar, S.; Rangan, P.V.

Author Affiliation: Dept. of Comput. Sci. & Eng., California Univ., San Diego, La Jolla, CA, USA

Journal: Proceedings of the SPIE - The International Society for Optical Engineering Conference Title: Proc. SPIE - Int. Soc. Opt. Eng. (USA)

vol.2417 p.202-14

Publication Date: 1995 Country of Publication: USA

CODEN: PSISDG ISSN: 0277-786X

U.S. Copyright Clearance Center Code: 0 8194 1764 5/95/\$6.00

Conference Title: Multimedia Computing and Networking 1995

Conference Sponsor: SPIE; Soc. Imaging Sci. & Technol

Conference Date: 6-8 Feb. 1995 Conference Location: San Jose, CA, USA

Language: English

Subfile: C

Copyright 1995, IEE

**Title: Content-based inter-media synchronization**

Abstract: Intermedia **synchronization** methods developed until now have been based on syntactic timestamping of **video** frames and **audio** samples. These methods are not fully appropriate for the **synchronization** of **multimedia** objects which may have to be accessed individually by their contents, e.g. content based data **retrieval**. We propose a content based **multimedia synchronization** scheme in which a media stream is viewed as hierarchical composition of smaller objects which are logically structured based on their contents, and the **synchronization** is achieved by deriving temporal relations among logical **units** of media object. Content based **synchronization** offers several advantages such as, elimination of the need for time stamping, freedom from limitations of jitter, **synchronization** of independently captured media objects in video **editing**, and compensation for inherent asynchronies in capture times of **video** and **audio**.

Descriptors: information **retrieval** ; ...

... **multimedia** computing...

... **synchronisation**

Identifiers: content based intermedia **synchronization** ; ...

...content-based inter-media **synchronization** ; ...

...intermedia **synchronization** methods...

... **multimedia** objects...

...content based data **retrieval** ; ...

...content based **multimedia synchronization** scheme...

...logical **units** ; ...

...video **editing** ;

1995

35/3,K/20 (Item 20 from file: 2)  
DIALOG(R)File 2:INSPEC  
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4547294 INSPEC Abstract Number: B9401-6210L-107, C9401-3350-011

**Title: Multimedia -integrated real-time control systems**

Author(s): Guha, A.; Agrawal, M.B.; Rundquist, R.R.

Author Affiliation: Honeywell Sensor & System Dev. Center, Minneapolis, MN, USA

Conference Title: Proceedings of the IEEE Workshop on Real-Time Applications (Cat.No.93TH0559-5) p.29-33

Publisher: IEEE Comput. Soc. Press, Los Almitos, CA, USA

Publication Date: 1993 Country of Publication: USA ix+216 pp.

ISBN: 0 8186 4130 4

U.S. Copyright Clearance Center Code: 0 8186 4130 4/93/\$03.00

Conference Sponsor: IEEE

Conference Date: 13-14 May 1993 Conference Location: New York, NY, USA

Language: English

Subfile: B C

**Title: Multimedia -integrated real-time control systems**

Abstract: **Multimedia** applications are becoming pervasive and are expected to be used in advanced process **control** systems where image data is related to higher order material qualities. The authors have analyzed real-time **control** applications and their needs. A necessary component to support such a distributed **multimedia** integrated **control** system is the need for **network** services that support both the real-time needs of **control** as well as the **control** traffic. The analysis shows that the **primary network** services must include support for **network** scheduling for multilevel priority traffic and for **synchronization** of remote **data transmissions** and stream **multimedia** traffic. They propose an asynchronous transfer mode (ATM)-based **network** architecture that uses a new real-time **control** protocol to provide these services.

...Descriptors: **computer networks** ; ...

... **multimedia** systems...

...process **computer control** ; ...

... **synchronisation**

Identifiers: process **control** systems...

...real-time **control** ; ...

...distributed **multimedia** integrated **control** system...

... **network** services...

... **control** traffic...

... **network** scheduling...

... **synchronization** ; ...

...stream **multimedia** traffic

1993

35/3,K/21 (Item 21 from file: 2)

DIALOG(R) File 2:INSPEC

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04369340 INSPEC Abstract Number: B9305-6210L-003, C9305-5620-001

**Title: Techniques for multimedia synchronization in network file systems**

Author(s): Rangan, P.V.; Ramanathan, S.; Vin, H.M.; Kaepner, T.

Author Affiliation: Dept. of Comput. Sci. & Eng., California Univ., San Diego, La Jolla, CA, USA

Journal: Computer Communications vol.16, no.3 p.168-76

Publication Date: March 1993 Country of Publication: UK

CODEN: COCOD7 ISSN: 0140-3664

U.S. Copyright Clearance Center Code: 0140-3664/93/030168-09\$3.00

Language: English

Subfile: B C

**Title: Techniques for multimedia synchronization in network file systems**

Abstract: One of the unique features that distinguishes digital **multimedia** from traditional **computer** data is the presence of multiple media streams, whose display must proceed in a mutually **synchronized** manner. The design of techniques for **synchronization** of **multimedia** data at the time of **storage**, and **retrieval** from network file **servers** is the subject matter of this paper. The authors present algorithms by which a file **server** can create a relative time system and **synchronize** media **units** transmitted by different sources on a network to construct a **multimedia** object. These algorithms stay robust in the absence of global clocks, in the presence of...

... jitter and generation rate mismatches. The authors develop a feedback technique by which the file **server** can detect asynchronies in display **devices** during **retrieval** of **multimedia** objects, and even **restore synchrony** by deleting or duplicating media **units** destined for asynchronous destinations. They then present strategies by which the file **server** can actually predict the time in future when the asynchrony of a **device** is expected to exceed the permitted bound, and take gradual preventive action to nullify the asynchrony in advance. These algorithms can be generalized to heterogeneous **multimedia** networks in which there may be variations in sizes of media **units** generated, differences in network locations of sources and destinations, etc.

Descriptors: file **servers** ; ...

... **multimedia** systems...

... **synchronisation**

Identifiers: **multimedia** **synchronization** ; ...

...mutually **synchronized** manner...

...network file **servers** ;

1993

35/3,K/23 (Item 23 from file: 2)

DIALOG(R)File 2:INSPEC

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04058769 INSPEC Abstract Number: B9202-6450D-008, C9202-6160Z-029

**Title: Designing file systems for digital video and audio**

Author(s): Venkat Rangan, P.; Vin, H.M.

Author Affiliation: Dept. of Comput. Sci. & Eng., California Univ., San Diego, La Jolla, CA, USA

Journal: Operating Systems Review vol.25, no.5 p.81-94

Publication Date: 1991 Country of Publication: USA

CODEN: OSRED8 ISSN: 0163-5980

U.S. Copyright Clearance Center Code: 0163-5980/91/0009-0081\$1.50

Conference Title: Thirteenth ACM Symposium on Operating Systems Principles

Conference Sponsor: ACM

Conference Date: 13-16 Oct. 1991 Conference Location: Pacific Grove, CA, USA

Language: English

Subfile: B C

**Title: Designing file systems for digital video and audio**

Abstract: The unique requirements are given, of a **multimedia** file system such as continuous **storage** and **retrieval** of media, maintenance of **synchronization** between **multiple** media streams, and efficient manipulation of huge media objects. The authors present a model that relates disk and **device** characteristics to the **recording** rate and derive **storage** granularity and scattering parameters that guarantee continuous access. In order for the file system to support **multiple concurrent** requests, they develop admission **control** algorithms for determining whether a new request can be accepted without violating the real-time...

... a strand as an immutable sequence of continuously recorded media samples, and then present a **multimedia** rope abstraction which is a **collection** of individual media strands tied together by **synchronization** information. They devise operations for efficient manipulation of multi-stranded ropes, and develop an algorithm for maintaining the scattering parameter during **editing** so as to guarantee continuous playback of **edited** ropes.

...Descriptors: data **communication systems** ; ...

...information **retrieval systems**...

... **multimedia systems**

...Identifiers: **multimedia** file system...

...continuous **storage** ; ...

... **synchronization** ; ...

... **multiple** media streams...

... **device** characteristics...

... **recording** rate...

... **storage** granularity...

... **multiple concurrent** requests...

...admission control algorithms...

... multimedia rope abstraction...

... synchronization information  
1991



35/3,K/28 (Item 28 from file: 2)

DIALOG(R) File 2:INSPEC

(c) 2005 Institution of Electrical Engineers. All rts. reserv.

02941097 INSPEC Abstract Number: C87048501

**Title:** An editing method of synchronized multimedia data for a communication terminal

Author(s): Hayashi, Y.; Tanigawa, H.; Nakane, K.; Sakai, Y.

Author Affiliation: NTT Electr. Commun. Labs., Yokosuka, Japan

Journal: Transactions of the Institute of Electronics, Information and Communication Engineers B vol.J70B, no.2 p.214-21

Publication Date: Feb. 1987 Country of Publication: Japan

CODEN: DJTBEU ISSN: 0373-6105

Language: Japanese

Subfile: C

**Title:** An editing method of synchronized multimedia data for a communication terminal

**Abstract:** Synchronized multimedia storage service provides telecommunication with such media as document, voice and drawing/writing. For realizing this service an editing function for input data is very essential. The authors propose an editing method for synchronized multimedia data as follows. (1) A segmentation method to make editing easy. (2) Efficient voice data retrieval method using the time correlation between media (3) Data elimination and insertion method which does not lose the synchronized correction between multimedia data and which minimizes the unnaturalness after editing.

**Descriptors:** computer graphics...

... synchronisation ; ...

...text editing ;

Identifiers: computer graphics...

... editing method...

... synchronized multimedia data...

...communication terminal ; ...

... multimedia storage service...

... synchronized correction

1987

35/3,K/68 (Item 13 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
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04745166 E.I. No: EIP97073721768

**Title:** Client based synchronization control of coded data streams  
**Author:** Daami, Mourad; Georganas, Nicolas D.  
**Corporate Source:** Univ of Ottawa, Ottawa, Ont, Can  
**Conference Title:** Proceedings of the 1997 IEEE International Conference on Multimedia Computing and Systems, ICMCS  
**Conference Location:** Ottawa, Ont, Can **Conference Date:** 19970603-19970606  
**E.I. Conference No.:** 46571  
**Source:** International Conference on Multimedia Computing and Systems-Proceedings 1997. IEEE, Los Alamitos, CA, USA. p 387-394  
**Publication Year:** 1997  
**CODEN:** 002114  
**Language:** English

**Title:** Client based synchronization control of coded data streams  
**Abstract:** In a **multimedia** news on demand application, the delivery of **multiple** streams of data over a **network** will introduce inevitable delays and delay variations that disrupt both inter- and intra- media **synchronization**. Therefore, a complete stream **synchronization** protocol must be specified and tested to ensure proper rendering of the **multimedia** presentation at the client. In such a protocol, special treatment should be considered for time...

...presence of a hardware/software decoding entity at the client. We propose a client based **control** scheme using buffer occupancy as its **main** parameter. The **control** scheme uses time contraction and expansion concepts to: avoid data overflow or underflow conditions and enforce intra-media **synchrony** of the data stream. We refer to such a **control** mechanism as the predecoder **synchronization controller**. We consider both motion **JPEG** and **MPEG** video bit streams and discuss the implementation and architectural constraints encountered. (Author abstract)  
14 Refs.

**Descriptors:** \*Data processing ; Synchronization ; Computer networks ; Network protocols; Computer software; Buffer storage ; Decoding; Constraint theory; Distributed computer systems  
**Identifiers:** Stream **synchronization** protocols; Coded data streams

35/3,K/72 (Item 17 from file: 8)  
DIALOG(R)File 8: Ei Compendex(R)  
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04623823 E.I. No: EIP97023519768

**Title:** Synchronized continuous media playback through the World Wide Web

Author: Mayer-Patel, Ketan; Simpson, David; Wu, David; Rowe, Lawrence A.  
Corporate Source: Univ of California at Berkeley, Berkeley, CA, USA  
Conference Title: Proceedings of the 1996 4th ACM International  
Multimedia Conference  
Conference Location: Boston, MA, USA Conference Date: 19961118-19961122  
E.I. Conference No.: 45965  
Source: Proceedings of the ACM International Multimedia Conference &  
Exhibition 1996.. p 435-436  
Publication Year: 1996  
CODEN: 002179  
Language: English

**Title:** Synchronized continuous media playback through the World Wide Web

...Abstract: with a World Wide Web browser to access remotely stored continuous media data (i.e., video and audio) and provide synchronized playback of multiple media streams. The cmplayer communicates with a server process also written with CMT to stream media data across the network using adaptive control to compensate for limited network bandwidth, server utilization, and client CPU resources. A simple script format is used to indicate the location of each piece of media data (i.e., hostname, port number and the filename) and specify source synchronization between media streams. Multiple video and audio streams can be specified. In addition, scrolling text streams and streams of Tcl commands can be integrated as stream types. A stream can be stored in multiple media data files distributed on different servers. Cmplayer script files are ASCII text and are typically less than 10 lines long. Cmplayer...

Descriptors: \*Information retrieval systems; Distributed database systems; Computer networks; Bandwidth; Synchronization; Adaptive control systems; Interactive computer systems; Computer aided software engineering

35/3,K/75 (Item 20 from file: 8)

DIALOG(R)File 8: Ei Compendex(R)

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04254908 E.I. No: EIP95092863272

**Title: Media synchronization mechanism for a distributed multimedia system with interactive control**

Author: Ohno, Ryuichi; Aida, Hitoshi; Saito, Tadao

Corporate Source: Hitachi Corp, Kokubunji-shi, Jpn

Source: IEICE Transactions on Communications v E78-B n 7 Jul 1995. p 980-986

Publication Year: 1995

CODEN: ITRCEC ISSN: 0916-8516

Language: English

**Title: Media synchronization mechanism for a distributed multimedia system with interactive control**

Abstract: **Synchronization** of media streams is recognized as an important requirement not only in media retrieval such...

...but also in groupware such as a remote conferencing system. In a remote conferencing system, **synchronization** is more complicated because Live Media Streams (LMS) such as the live raw voice of...

...consideration as well as Retrieved Media Streams (RMS) such as media streams retrieved from video **equipment**. In this paper, we propose a mechanism to **synchronize** RMSs and LMSs in a remote conferencing system. DMSIC (Distributed **Multimedia** System with Interactive **Control**) which has been implemented on UNIX **workstations** connected by **Ethernet**. In this mechanism, **synchronization** among RMSs (we call it R&R **synchronization**) is kept by maintaining the Current Presentation Positions (CPP) on Media Buffers (MB) close to the Ideal Presentation Position (IPP). **Synchronization** among RMSs and LMSs (we call it R&L **synchronization**) is kept by adjusting the IPPs among **multiple** nodes. We have implemented the **synchronization** mechanism in DMSIC to confirm the effectiveness of it. (Author abstract) 11 Refs.

Descriptors: \*Distributed database systems; **Synchronization**; Information **retrieval** systems; Video telephone **equipment**; Education computing; UNIX; **Computer workstations**; **Computer networks**; Teleconferencing; Information services

Identifiers: **Multimedia synchronization**; Ideal presentation position; Remote conferencing systems; Live media streams; Retrieved media streams; Distributed **multimedia** system with interactive **control**; **Ethernet**; Current presentation position; Media buffers

35/3,K/80 (Item 25 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
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04062715 E.I. No: EIP95022558579

**Title: Temporal synchronization support for distributed multimedia information systems**

Author: Lu, G.J.; Pung, H.K.; Chua, T.S.; Chan, S.F.

Corporate Source: Natl Univ of Singapore, Singapore, Singapore

Source: Computer Communications v 17 n 12 Dec 1994. p 852-862

Publication Year: 1994

CODEN: COCOD7 ISSN: 0140-3664

Language: English

**Title: Temporal synchronization support for distributed multimedia information systems**

Abstract: A **synchronization** scheme that meets the four media **synchronization** requirements in DMIS is proposed. In this scheme, the media relationships are specified with the...

...script language from which the presentation schedule is generated. The presentation schedule is maintained by **controlling** the request times of data transfer for various media streams and by providing appropriate buffers...

...general DMISs where the inter-media relationships are complex and the data is stored in **more** than **one server** in the **network**. The scheme was tested on an **Ethernet** -Unix platform and has proved to be reliable. 26 Refs.

Descriptors: \*Distributed **computer** systems; **Synchronization** ; User interfaces; Interconnection **networks** ; Stochastic **control** systems; **Data transfer** ; UNIX; Interactive **computer** systems

Identifiers: Distributed **multimedia** information systems; Stochastic **network** ; **Ethernet** Unix platform

35/3,K/81 (Item 26 from file: 8)  
DIALOG(R)File 8:Ei Compendex(R)  
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03700129 E.I. No: EIP93091068274

**Title: MMV- synchronizing multimedia documents: an extension of CDA for synchronization and presentation of multimedia documents**

Author: Herzner, Wolfgang; Kummer, Matthias

Corporate Source: Forschungszentrum Seibersdorf, Seibersdorf, Austria

Source: Computers & Graphics (Pergamon) v 17 n 3 May-Jun 1993. p 219-228

Publication Year: 1993

CODEN: COGRD2 ISSN: 0097-8493

Language: English

**Title: MMV- synchronizing multimedia documents: an extension of CDA for synchronization and presentation of multimedia documents**

Abstract: The experiences of a prototype implementation are presented, which integrates dynamic media like **audio**, **video**, and digital **sound** (MIDI) into 'static' documents (text, **graphics**, images), to specify interactively the temporal layout-conditions - **synchronization** - and to present such documents under interaction with the user. To achieve this, first a...

...M\*\*), including references to the dynamic contents, then the temporal conditions are specified using a **synchronization editor**, and finally the document is presented through a presentation engine, which may be distributed over...

...nodes. The user may interact with the presentation by activating displayed buttons with the pointing **device**. A cue-based **synchronization** model is used, which is event-oriented and allows adjustment for delays caused by hardware...

Descriptors: **\*Computer** applications; **Synchronization**; User interfaces; Electronic publishing; Information **retrieval** systems

Identifiers: **Computer** aided document processing; Dynamic media; Digital Document Interchange Format; Digital Table Interchange Format

35/3,K/83 (Item 28 from file: 8)  
DIALOG(R) File 8: Ei Compendex(R)  
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03669571 E.I. No: EIP93071030861

**Title: Adaptive feedback techniques for synchronized multimedia retrieval over integrated networks**

Author: Ramanathan, Srinivas; Rangan, P. Venkat

Corporate Source: Univ of California at San Diego, La Jolla, CA, USA

Source: IEEE/ACM Transactions on Networking v 1 n 2 Apr 1993. p 246-260

Publication Year: 1993

CODEN: IEANEP ISSN: 1063-6692

Language: English

**Title: Adaptive feedback techniques for synchronized multimedia retrieval over integrated networks**

**Abstract:** Recent advances in **networking**, storage, and **computer** technologies are stimulating the development of **multimedia** on-demand services providing services similar to those of a neighborhood videotape rental store over metropolitan area **networks**. In this paper, we develop intermedia **synchronization** techniques for **multimedia** on-demand **retrieval** over integrated **networks** in the absence of global clocks. In these techniques, **multimedia servers** use lightweight messages called **feedback units** transmitted by media display sites (such as **audiophones** and **videophones**, generically referred to as mediaphones) to detect asynchronies among those sites. We present strategies by which the **multimedia server** can adaptively **control** the feedback transmission rate from that mediaphone, so as to minimize the associated overheads without permitting the asynchrony to exceed tolerable limits. We compare the performance of various **resynchronization** policies such as conservative, aggressive, and probabilistic. Performance evaluation of the feedback techniques indicates that their overheads are negligible; for a typical **audio / video** playback environment, the feedback frequency was about one in hundred. The media-specific **synchronization** techniques described in this paper possess an important advantage as compared to those based on clock **synchronization**: skipping and pausing of media **units** at the time of **resynchronization** can be based on the semantic content of the media **units**, thereby minimizing perceptible degradations in quality of media playback. (Author abstract) 15 Refs.

**Descriptors:** \***Computer networks**; Adaptive control systems; Information retrieval; **Synchronization**; Metropolitan area networks; Computational linguistics

**Identifiers:** Integrated networks; Synchronized multimedia retrieval; Feedback units

35/3,K/94 (Item 3 from file: 34)  
DIALOG(R)File 34:SciSearch(R) Cited Ref Sci  
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03973249 Genuine Article#: QW532 No. References: 12  
**Title:** MULTIMEDIA STORAGE SERVERS - A TUTORIAL  
**Author(s):** GEMMELL DJ; VIN HM; KANDLUR DD; RANGAN PV; ROWE LA  
**Corporate Source:** SIMON FRASER UNIV/BURNABY/BC V5A 1S6/CANADA/; UNIV  
TEXAS,DISTRIBUTED MULTIMEDIA COMP LAB/AUSTIN//TX/78712; IBM CORP,THOMAS  
J WATSON RES CTR/YORKTOWN HTS//NY/10598; UNIV CALIF SAN  
DIEGO,MULTIMEDIA LAB/LA JOLLA//CA/92093  
**Journal:** COMPUTER, 1995 , V28, N5 (MAY), P40-49  
**ISSN:** 0018-9162  
**Language:** ENGLISH **Document Type:** ARTICLE (Abstract Available)

**Title:** MULTIMEDIA STORAGE SERVERS - A TUTORIAL  
, 1995

**Abstract:** On-line access to **multimedia** information--like books, periodicals, images, video clips, and scientific data--is both possible and cost-effective, thanks to recent advances in computing and communication. Some media, such as **audio** and **video**, are classified as continuous because **audio** samples and **video** frames, for example, have meaning only when presented in time. The design of **multimedia servers** thus fundamentally differs from conventional **servers** as a result of (1) real-time **storage** and **retrieval** requirements, as well as (2) large **storage** space and **data transfer** -rate requirements of digital **multimedia**. In this tutorial, the authors highlight the issues involved in meeting these requirements. For example, the critical components in the design of **multimedia** services are **storage servers** that support continuous media **storage** and **retrieval**, and **network** subsystems that **synchronously** deliver media information, on time, to the client sites.

In their survey of design issues, the authors present disk-scheduling algorithms (optimized for **retrieving multimedia** information) for real-time **recording** and playback. The authors also discuss admission **control** algorithms that let a **multimedia server** determine whether new services can be added without the **server**'s violating the real-time requirements of existing ones.

In terms of service, the authors assume that performance requirements of **multimedia storage servers** include meeting all real-time deadlines, although some applications can tolerate missing one occasionally. **Servers** have **several** quality-of-service (QoS) categories: (1) Deterministic--All deadlines are guaranteed to be met; (2)...  
...probability (perhaps 90 percent); and (3) Background--No guarantees are given for meeting deadlines (the **server** schedules access only when there is time left over after all other service).

The authors also examine techniques for efficiently placing media information on individual disks, large disk arrays, and **storage device** hierarchies. Finally, they describe data structures that a **multimedia** file system must maintain to facilitate random access and efficient **editing**.



35/3,K/111 (Item 11 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
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03111725 JICST ACCESSION NUMBER: 97A0342769 FILE SEGMENT: JICST-E  
Multi- Video Stream Play Out and Multi - Media Communication Service for  
AudioLink System.

SAKATANI TOORU (1); WATANABE HIROSHI (1); MARUI HIROJI (1); HOTTA SEIKO  
(1); KOYANO HIROSHI (1)

(1) Nippon Telegraph & Telephone Corp., Human Interface Lab.  
Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report  
(Institute of Electronics, Information and Communication Enginners),  
1997 , VOL.96,NO.515(MVE96 60-67), PAGE.35-38, FIG.4, REF.5

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:654 681.3:621.397.3

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

Multi- Video Stream Play Out and Multi - Media Communication Service for  
AudioLink System.

, 1997

ABSTRACT: Synchronization among multiple video and audio streams is  
discussed, and multi- video stream play out is installed on the  
AudioLink System. Furthermore, synchronization between audio /  
video stream and text/ graphics is discussed. (author abst.)

...DESCRIPTORS: communication control ; ...

...signal synchronization ; ...

... multi - media ; ...

... computer network ; ...

... computer system(hardware...

... internet ; ...

...client server system

...BROADER DESCRIPTORS: regeneration ; ...

... control ; ...

... synchronization ; ...

...communication network ; ...

...information network ; ...

... network ;

35/3,K/115 (Item 15 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
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02611830 JICST ACCESSION NUMBER: 95A0928603 FILE SEGMENT: JICST-E  
Multimedia office systems integrating groupware with multimedia on  
demand.

MIZUNO HIROMI (1); FUKUOKA HIDEYUKI (1); TANIGUCHI KUNIHIRO (1); TACHIKAWA  
HITOYA (1); SAKAGAMI HIDEKAZU (1); KAWASAKI SHIGEHITO (1)  
(1) NEC C&CKen

Denshi Joho Tsushin Gakkai Gijutsu Kenkyu Hokoku(IEIC Technical Report  
(Institute of Electronics, Information and Communication Enginners),  
1995 , VOL.95,NO.255(IE95 51-57), PAGE.35-42, FIG.12, REF.9

JOURNAL NUMBER: S0532BBG

UNIVERSAL DECIMAL CLASSIFICATION: 681.3:654

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

Multimedia office systems integrating groupware with multimedia on  
demand.  
, 1995

ABSTRACT: A multimedia platform integrating groupware with multimedia  
on demand is proposed. The multimedia platform integrates stored  
information retrieving with realtime bi-directional communication, and  
the integration is realised by cooperation of groupware servers MCU(  
Multipoint Control Unit)s with multimedia on demand servers .  
Cooperation protocols are developed to realise the server 's  
cooperation without any modification to the existing servers .  
Multimedia synchronization control scheme for realtime  
communication is also provided. Multimedia office systems developed  
on this platform provides both realtime and stored video naturally  
synchronized with audio th the users. (author abst.)

DESCRIPTORS: LAN ; ...

...ATM network ; ...

... multi - media ; ...

... synchronous control ; ...

... computer system(hardware...

...client server system

BROADER DESCRIPTORS: computer network ; ...

...communication network ; ...

...information network ; ...

... network ; ...

... control ; ...

... computer program

35/3,K/118 (Item 18 from file: 94)

DIALOG(R)File 94:JICST-EPlus

(c)2005 Japan Science and Tech Corp(JST). All rts. reserv.

02097336 JICST ACCESSION NUMBER: 94A0732335 FILE SEGMENT: JICST-E  
A Synchronization **Mechanism in a Distributed Multimedia System with  
Interactive Control** .

ONO RYUICHI (1); AIDA HITOSHI (1); SAITO TADAO (1)

(1) Univ. of Tokyo, Fac. of Eng.

Joho Shori Gakkai Kenkyu Hokoku, 1994 , VOL.94,NO.56(DPS-66), PAGE.121-126  
, FIG.5, REF.5

JOURNAL NUMBER: Z0031BAO ISSN NO: 0919-6072

UNIVERSAL DECIMAL CLASSIFICATION: 681.51:007.51 681.3:654 681.3.002+

LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan

DOCUMENT TYPE: Journal

ARTICLE TYPE: Original paper

MEDIA TYPE: Printed Publication

A Synchronization **Mechanism in a Distributed Multimedia System with  
Interactive Control** .  
, 1994

ABSTRACT: In this paper, we propose a technique to keep **multiple  
Retrieved Media Streams(RMS) synchronized** at the time of  
presentation while absorbing load variations in a Distributed  
**Multimedia System with Interactive Control** (DMSIC) which has been  
implemented on UNIX **workstations** connected by **Ethernet** . An  
evaluation of this technique shows that each node can adjust the  
delivery(or presentation) of media **units** according to the capacity of  
the **CPU** without being affected by a node with a lower capacity **CPU** .  
(author abst.)

...DESCRIPTORS: **computer network** ; ...

... **multi - media** ; ...

... **synchronous** processing...

... **workstation** ;

...BROADER DESCRIPTORS: **communication network** ; ...

...**information network** ; ...

... **network** ; ...

... **computer** program...

... **computer** ;

35/3,K/124 (Item 24 from file: 94)  
DIALOG(R)File 94:JICST-EPlus  
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00884180 JICST ACCESSION NUMBER: 89A0248288 FILE SEGMENT: JICST-E  
Multi - media synchronized storage techniques.  
HAYASHI YASUHIRO (1); TANIGAWA HIROYA (1)  
(1) NTT Hyuman'intafesuken  
NTT Denki Tsushin Kenkyujo Kenkyu Jitsuyoka Hokoku(Electrical Communication  
Laboratories Technical Journal), 1989 , VOL.38,NO.3, PAGE.289-298,  
FIG.6, TBL.2, REF.1  
JOURNAL NUMBER: F0137ABH ISSN NO: 0415-3200  
UNIVERSAL DECIMAL CLASSIFICATION: 681.3.02:651.2 621.391.1  
LANGUAGE: Japanese COUNTRY OF PUBLICATION: Japan  
DOCUMENT TYPE: Journal  
ARTICLE TYPE: Original paper  
MEDIA TYPE: Printed Publication

Multi - media synchronized storage techniques.  
, 1989  
ABSTRACT: A multi - media synchronized storage system allows  
communication of sophisticated messages by inputting, storing and  
outputting synchronous composite media-including voice , still  
picture , drawing and pointing. In general, the editing functions are  
essential to storage systems. Above all, this system needs functions  
which maintain synchronization among media data. This paper describes  
a method of establishing a multi - media storage system with  
synchronized editing functions and the effectiveness of the  
resulting system. The established techniques are: (1) data  
segmentation, (2) synchronous composition of multi - media data,  
(3) rapid retrieval of voice data, and (4) editing of  
synchronously restored multi - media data.(author abst.)  
DESCRIPTORS: synchronous processing...

...data retrieval ; ...  
...data storage ; ...  
... editing ; ...  
...segmentation( computer ); ...  
...data retrieval system...  
...personal computer ;  
...BROADER DESCRIPTORS: fact retrieval ; ...  
...information retrieval ; ...  
... retrieval ; ...  
...information storage ; ...  
... storage and accumulation...  
...information retrieval system...  
... computer application system...  
...digital computer ; ...

... computer ;

39/3,K/45 (Item 45 from file: 348)  
DIALOG(R)File 348:EUROPEAN PATENTS  
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00893543

**System and method for on-line multimedia access**  
**System und Verfahren fur Online- Multimedia -Zugriff**  
**Systeme et methode d'accès en-ligne a des informations multimedia**  
PATENT ASSIGNEE:

Sun Microsystems, Inc., (2616592), 4150 Network Circle, Santa Clara,  
California 95054, (US), (Applicant designated States: all)

INVENTOR:

Liu, James C., 520 Alberta Avenue, Sunnyvale, California 94087, (US)

LEGAL REPRESENTATIVE:

Harris, Ian Richard et al (72231), D. Young & Co., 21 New Fetter Lane,  
London EC4A 1DA, (GB)

PATENT (CC, No, Kind, Date): EP 817103 A2 980107 (Basic)  
EP 817103 A3 031015

APPLICATION (CC, No, Date): EP 97304262 970618;

PRIORITY (CC, No, Date): US 671581 960628

DESIGNATED STATES: GB

INTERNATIONAL PATENT CLASS: G06F-017/30 ; G11B-027/00 ; G10H-001/36 ;  
G07F-017/30

ABSTRACT WORD COUNT: 189

NOTE:

Figure number on first page: 1

LANGUAGE (Publication,Procedural,Application): English; English; English  
FULLTEXT AVAILABILITY:

Available Text	Language	Update	Word Count
CLAIMS A	(English)	9802	2673
SPEC A	(English)	9802	4445
Total word count - document A			7118
Total word count - document B			0
Total word count - documents A + B			7118

**System and method for on-line multimedia access**  
**System und Verfahren fur Online- Multimedia -Zugriff**  
**Systeme et methode d'accès en-ligne a des informations multimedia**  
INTERNATIONAL PATENT CLASS: G06F-017/30 ...

... G11B-027/00 ...

... G10H-001/36

...ABSTRACT A2

Disclosed is a method and system for providing access to **multimedia** content on-line which is **updated** virtually **simultaneously** with the vendor's **update** process. By a user accessing a page on the World Wide Web, for example, data...

...downloaded to a user's computer system for quick access. Depending upon the user's **computer** system ( **LAN** or a stand-alone personal **computer** ), "applets" containing data and instructions are stored for immediate access. In a Karaoke application of...

...SPECIFICATION and hardware independent. The Java software architecture is designed to support platforms ranging from personal **computers** to embedded **network devices** of the type similar to a Java desktop device (recently announced by Sun and Oracle...

...explicitly set out in the Claims.

A user of this invention is able to access **multimedia** content on-line which is **updated** virtually **simultaneously** with the vendor's **update** process. In the event that a vendor updates the data frequently, the user will benefit...

...downloaded to a user's computer system for quick access. Depending upon the user's **computer** system ( **LAN** or a stand-alone personal **computer** ), "applets" containing data and instructions are stored for immediate access. An applet in and of...

...completely unaware of the automatic delivery of an applet including data and instructions from a **main** data base **server** . When the user accesses a page, a song list and other information is displayed on...to enable the user to make choices and thus send a request to a remote **server** for the delivery of **multimedia** content. Once authentication has taken place, one or more applets are sent by the remote **server** which deliver the **multimedia** content.

Applets are **stored** in a **network** of **servers** for efficient delivery to a user. FIG. 1 shows a main database 72 in communication with caching subservers 74a, 74b, 74c, 74d and 74e. The **main server** defines the **master** database of all songs released. This database can rely on any known database technology whose hardware will usually reside at the central distribution site for data defined by the implementor. **Multiple main servers** are permitted for redundancy.

Caching subservers define a location specific server which caches songs for...

...local Karaoke clients. The purpose of the caching subservers is to reduce load on the **main server** generated by song requests, and reduce long distance **network** traffic to the **main server** by caching songs locally. If a caching server does not have in memory, a song...

...master list. Subserver 74e is further shown in communication with subservers 76a, 76b and 76c. **Networked computers** may be arranged in other configurations as well.

An array of dedicated Karaoke terminals 78a...

...a mouse. Alternatively, the Karaoke page is accessed, for example, by a user's personal **computer** , **LAN** , laptop, PDA, **workstation** , **television** or telephone 82a, 82b or 82c, wireless or wired. In any manner of transmission from...at box 42 (see FIG. 3) the applet calls back to the database (stored on **main server** 72 or a subserver) to request **audio** , **video** , timing and lyric information at box 88. At box 92, to deliver the content in...above, the Karaoke applets run inside a browser, providing for the user selection of a **song** , **downloads audio** , **downloads the video** images, **downloads the ASCII lyrics** and **downloads the timing data**. Each download occurs using a separate thread  
...

CLAIMS 1. A system for providing on-line **multimedia** content output to a user on said user's **computer** system, comprising:  
a browser configured to provide access to a page and at least one...

...and wherein said component further includes instructions which when executed synchronize the delivery of said **multimedia data** elements;

a **transmitter** configured to automatically download said at least one component to said user's computer system including a display

apparatus; and  
 an execution **unit** configured to execute said instructions to generate **multimedia** content output including audio output from said audio data element, text output from said text...

...configured to display unencrypted data in a manner which enables said user to make a **multimedia** content output choice;  
 an output **unit** configured to generate on said display unit a representation of unencrypted data in a manner which enables a user to make a **multimedia** content choice and an authentication request;  
 a **processor** configured to generate a **multimedia** content output choice and an authentication request;  
 an execution **unit** configured to execute said request for authentication in order to provide a key to decrypt...

...to generate multimedia content output therefrom;  
 a receiver configured to receive said authentication; and  
 a **processor** configured to generate **multimedia** content output.

9. A system as recited in Claim 1 wherein said audio data element...

...multimedia data elements is queued for sequential delivery.

12. A method for providing on-line **multimedia** content output to a user on said user's **computer** system, comprising the steps of:  
 via a browser, providing access to a page and at...

...and wherein said component further includes instructions which when executed synchronize the delivery of said **multimedia** content data elements to said user's **computer** system;  
 automatically downloading said at least one component to said user's **computer** system; and  
 executing said instructions to generate **multimedia** content output including audio output from said audio data element in the form of a ...said delta time.

25. A method for providing to a user, on said user's **computer** system, on-line access to **multimedia** content, comprising the steps of:  
 via a browser, providing access to a page containing at...

...method as recited in Claim 25 wherein said multimedia generating step comprises the following steps:  
**storing** and delivering **multimedia** audio , graphics , text and timing data elements;  
**storing** and delivering instructions which when executed synchronize the delivery of said multimedia data elements; and...

...output in accordance with said timing data element.

27. A system for providing on-line **multimedia** content output to a user on said user's **computer** system, comprising.  
 browser means for providing access to a page and at least one component ...

...and wherein said component further includes instructions which when executed synchronize the delivery of said **multimedia** data elements;

**downloading** means for automatically downloading said at least one component to said user's **computer** system; and  
 execution means for executing said instructions to generate **multimedia** content output including audio output from said audio data element, text output from said text...

...said user to choose songs from said list so that said delivery of said



- songs' **multimedia** data elements is queued for sequential delivery
31. A **server** , comprising:
- a storage **unit** configured to **store** a browser embedded component, including **multimedia audio** , **graphics** , text and timing data elements, instructions which when executed synchronize the delivery of said multimedia...an applet.
38. A computer-readable medium having computer readable code stored therein, comprising:
- a **computer** -readable code module configured to **store multimedia audio** , **graphics** , text and timing data elements and instructions which when executed synchronize the delivery of said...
- ...38 wherein said audio output when executed resembles the sound of metals balls clanging, such **audio** output delivered in a synchronized manner with said **graphics** output in accordance with said timing element.
45. A **computer** readable medium as recited in Claim 38 wherein said audio data element is fragmented into...

Set	Items	Description
S1	455129	AUDIO? OR VOICE? OR SOUND? OR MUSIC? OR SONG? OR ACOUSTIC? OR JUKEBOX?
S2	626101	VIDEO? OR VTR OR VCR OR PHOTOGRAPH? OR GRAPHIC? OR PICTUR? OR PICTOR? OR STILL()IMAGE? OR MOVIE? OR (MOTION? OR MOVING) (- )IMAGE?
S3	287758	TV OR TELEVISION? OR MPEG OR JPEG
S4	48635	DVD OR DVDS OR DIGITAL?() (CONTENT? OR DATA OR INFO OR INFO- RMATION?) OR DIGITAL?() (VIDEO OR VERSATIL?) () (DISC? OR DISK? - OR RECORDER?) OR DVR OR DVRS
S5	112676	MULTIMEDIA? OR MULTI()MEDIA?
S6	1212741	DEVICE? OR UNIT? ? OR MODULE? ? OR APPLIANCE? OR EQUIPMENT? OR SERVER? OR TERMINAL? ? OR STATION? ?
S7	1013660	CONTROLLER? OR COMPUTER? OR CPU OR CPUS
S8	435921	CENTRAL()PROCESS? OR PROCESSOR? OR MICRO()PROCESS? OR DATA- (())PROCESS? OR MICROCOMPUTER? OR WORKSTATION? OR WORK()STATION?
S9	1366822	CHIEF? OR MAIN OR MANAGER? OR MANAGING? OR MASTER? OR CENT- ER? OR CENTRAL? OR COMMAND OR BASE
S10	579441	HUB OR HUBS OR PRIMARY OR PRINCIPAL OR CONTROLLER? OR CONT- ROLLING? OR CONTROL
S11	817041	MULTIP? OR MULTIT? OR SEVERAL? OR NUMEROUS? OR MORE(2W)ONE OR TWO(2W)MORE OR ASSEMBLY? OR ASSEMBLIE?
S12	1130664	COLLECTION? OR NETWORK? OR LAN OR WAN OR LANS OR WANS OR I- NTERNET? OR ETHERNET? OR EXTRANET?
S13	575265	ONLINE? OR INTRANET? OR COMMUNICAT?()SYSTEM? OR WAP OR WAPS OR LIBRAR? OR ARCHIV? OR VARIET?
S14	133611	SYNCHRON? OR SYNCRON? OR COINCID? OR SIMULTAN? OR (RENDER? OR MAKE? OR MAKING OR MADE)()IDENTICAL? OR IDENTICALIZ? OR ID- ENTICALIS? OR RESYNCRON? OR RESYNCRON?
S15	128092	("SAME" OR IDENTIC? OR SIMILAR?())TIME? ? OR SYNC?? OR SYN- K?? OR CONTEMPORAN? OR CONCURREN? OR COOCCURR? OR CO()OCCUR?
S16	418199	UPDAT? OR UP(2W)DATE OR RESET? OR REFRESH? OR RELOAD? OR R- ESTOR? OR RENEW? OR REENABL? OR EDIT?? OR EDITING
S17	256457	PATCH? OR UPGRAD? OR FIXUP? OR REGENERAT? OR REPLENISH? OR REVITAL? OR REJUVENAT?
S18	375471	DOWNLOAD? OR DOWN()LOAD? OR UPLOAD? OR UP()LOAD? OR `INSTAL- L? OR (DOWN OR UP)()LINK? OR DOWNLINK? OR UPLINK?
S19	409902	RETRIEV? OR STORE? OR STORING? OR STORAG? OR RECORDING?
S20	107242	(DATA OR FILE? OR RECORD?) (3N) (TRANSFER? OR TRANSMI? OR OF- FLOAD? OR UNLOAD? OR FEED? OR FLOW?)
S21	223	ARQPRO OR ARQ()PRO OR AUDIOREQUEST()PRO OR AUDIO()REQUEST(- )PRO OR AMX OR REQUEST() (MULTIMEDIA OR MULTI()MEDIA)
S22	103530	(S1(10N)S2 OR S3:S5) (10N)S6:S8
S23	40	S21 AND S14:S15
S24	1987	S22 AND S14:S15(10N)S16:S20
S25	1584	S24 AND S9:S13(10N)S6:S8
S26	1060	S25 AND S16:S17 AND S18:S20
S27	1405	S25 AND S9:S10 AND S11:S13
S28	989	S26 AND S27
S29	34	S28 AND S14:S15(5N)S16:S17 AND S14:S15(5N)S18:S20
S30	375	S28 AND S14:S15(5N)S1:S5
S31	862	S28 AND S1:S5(5N)S6:S8
S32	343	S30 AND S31
S33	4	S32 AND S14:S15/TI
S34	78	S23 OR S29 OR S33
S35	64	S34 AND PY<2002
S36	62	RD (unique items)
S37	989	S28:S32
S38	9	S37 AND S14:S15/TI
S39	5	S38 NOT S33
S40	4	S39 AND PY<2002

S41 4 RD (unique items)  
S42 37 S37 AND S16:S20/TI AND S1:S5/TI  
S43 32 S42 NOT (S38 OR S34)  
S44 24 S43 AND PY<2002  
S45 24 RD (unique items)  
? show files  
File 275:Gale Group Computer DB(TM) 1983-2005/Jul 22  
(c) 2005 The Gale Group  
File 634:San Jose Mercury Jun 1985-2005/Jul 21  
(c) 2005 San Jose Mercury News  
File 647:CMP Computer Fulltext 1988-2005/Jul W1  
(c) 2005 CMP Media, LLC  
File 674:Computer News Fulltext 1989-2005/Jul W3  
(c) 2005 IDG Communications  
File 696:DIALOG Telecom. Newsletters 1995-2005/Jul 22  
(c) 2005 The Dialog Corp.  
?

36/3,K/7 (Item 7 from file: 275)  
DIALOG(R) File 275:Gale Group Computer DB(TM)  
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02283035 SUPPLIER NUMBER: 54221061 (USE FORMAT 7 OR 9 FOR FULL TEXT)

**SMIL: The New Web Format For Multimedia .( Synchronized Multimedia  
Integration Language) (Technology Information)**

Stanek, William Robert  
PC Magazine, 233(1)  
Feb 9, 1999

ISSN: 0888-8507 LANGUAGE: English RECORD TYPE: Fulltext; Abstract  
WORD COUNT: 3530 LINE COUNT: 00280

**SMIL: The New Web Format For Multimedia .( Synchronized Multimedia  
Integration Language) (Technology Information)**

**ABSTRACT: Synchronized Multimedia** Integration Language (SMIL) allows users to combine still images, audio, text, video and animations to...

**TEXT:**

...the chills, so I click on over to CNN and cue a video from the **archives** (Figure 1). Suddenly I realize that I'm watching a video recorded weeks ago, and...

How is this possible? The answer is SMIL ( **Synchronized Multimedia Integration Language**, pronounced smile). With SMIL, you can combine text, still images, audio, video, and...

...studios to create SMIL presentations, and you don't need to buy time on cable **networks** to broadcast your productions to the world either. In fact, all you need to create...

...you view a SMIL production you'll be amazed, especially when you realize the sophisticated **control** the protocol offers. For example, by adding a time line to a presentation, you can **control** when content is displayed and how transitions between various content types are handled. By defining layout regions, you can combine **multiple** forms of media and display them simultaneously. And by setting choices, you can even serve...

...see SMIL in action, you need a compatible player such as RealPlayer G2. Once you **download** and **install** the player, you can view SMIL presentations. The screenshot in Figure 2 shows a presentation...

...the scenes, the presentation's bandwidth needs are optimized based on the speed of your **Internet** connection. That is, the media files used by the presentation will depend on whether you...

...on channels, such as the Screening Room channel shown in Figure 2. Channels are like **TV stations** with content you can access on demand. Thus you determine the viewing schedule; you don...

...access those channels as easily as you access channels on your TV with a remote **control** . You simply click on the button of the channel you want to view. You can...

...you could even create the layout and design of SMIL presentations using a standard text **editor** if you really wanted to.

Early work on SMIL began in December 1995. The specification...

...behavior of multimedia presentations and the way media objects use hypertext links.

**SMIL Players And Servers**

SMIL players are client applications that receive and display integrated **multimedia** presentations. Like other client applications, SMIL players are only one side of the equation. SMIL...

...are also necessary.

Although SMIL itself is an open technology, some of the players and **servers** use proprietary techniques to handle **multimedia** streaming and encoding. This means you may be tied to a specific vendor for your...

...Hypermedia Presentation and Authoring System), RealPlayer G2, and RealPlayer Plus G2.

GRiNS combines a SMIL **editor** and player into an integrated system for working with SMIL presentations. You use GRiNS's **editor** component to create the markup necessary for SMIL presentations and the player component to play...

...back SMIL and HSL (Hypermedia Synchronization Language) files. HSL is an alternative format for creating **synchronized multimedia** presentations available from Digital **Equipment** Corp. ([www.research.digital.com/src/HPAS](http://www.research.digital.com/src/HPAS)).

GRiNS and HPAS are fairly versatile, but RealNetwork configured **multimedia servers** such as RealServer from RealNetworks. These **servers** are configured to handle **multiple** forms of media including text, **audio**, **video**, and animation, and they understand hypertext links. Thus you can provide links within a presentation...

...Because SMIL is a fairly new technology, there aren't many compatible servers. The showcase **server** available today is RealServer, which is available in a **variety** of configurations designed to fit specific needs. Because there's a version especially designed for ISPs, you may find that your ISP account can be **upgraded** to include support for SMIL presentations for a small additional charge. Keep in mind that...

...version will need to be the latest G2-compliant version.

Streaming and SMIL

With traditional **multimedia** files, such as **MPEG video** or **AIFF audio**, the playback **device** has to wait for the entire file to **download** before playback can begin. Streaming technology, on the other hand, lets **multimedia servers** send content in a continuous stream that can be decoded and played back shortly after being received. While it may take **several** minutes to **download** an MPEG video clip, a streamed video clip can begin to play within seconds. This...

...streamed presentations enjoyable--even on a 28.8 modem.

To enable streaming, the developers of **multimedia servers** had to rethink the way **data** is **transmitted** over the Web, because when it comes to **synchronized** media and streaming, HTTP isn't the best protocol to use. HTTP doesn't understand...

...for time-based seeking within a presentation. The protocol also supports multicasting for simultaneously broadcasting **multiple** files. You'll find RTSP at work in RealServer and in Netscape Media Server.

Microsoft...

...or ASF. But ASF requires you to stuff all your multimedia objects into a single **file** that is **transmitted** to the client packet by packet. RTSP, in contrast, uses the Web's standard URLs...

...the SMIL document and then create the actual media objects afterward. If you want to **update** a video clip in the presentation later, you would need

to recreate the entire presentation with ASF, but with RTSP you simply save the **updated** video clip to the expected location.

Creating SMIL Presentations

Now let's take a look...

...be displayed fully in the viewing window and automatically resized as necessary. But to play **multiple** media types simultaneously, you create miniwindows within the **main** viewing area, called regions.

You can think of regions as cells within a table. As...

```
...top="40" left="30" width="180" height="180"/>
</layout>
```

In this example we size the **main** viewing area <identified with the <root-layout>tag> to 250 by 230 pixels and then...

...viewing area: MyTextRegion and MyVideoRegion. MyTextRegion is positioned 5 pixels to the right of the **main** viewing area's left edge and 5 pixels down from the top of the **main** viewing area. MyVideoRegion is placed 30 pixels to the right of the **main** viewing area's left edge and 40 pixels down from the top of the **main** viewing area.

Once you've decided on the layout, you create a time line to...

...sequentially (one file right after another, normally in a single region) or in parallel, where **multiple** files can play simultaneously. When you present files in parallel, you can synchronize elements to...

...together. For example, you could create descriptive text files that highlight key moments in a **video** clip and then **synchronize** the display of those files with the **video** clip's time line.

**Synchronization** is at the core of SMIL, and as you would expect, SMIL provides many features for **controlling** the timing of media playback. You can set an explicit duration for a media clip...

...The <switch> tag tells the player it has a choice to make. Anytime you provide **multiple** routes through a presentation, you have to use this tag. Because bandwidth choices are evaluated...As we noted earlier, you could create the necessary markup file using your favorite text **editor**. SMIL editors are starting to debut, however, and two good ones to look at are T.A.G. **Editor** 2.0 for RealSystem G2 from Digital Renaissance (tag.digital-ren.com) and V-Active...

...any problems. Enjoy!

William Stanek is a frequent contributor to PC Magazine and author of **several** books, including FrontPage 98 Unleashed, Learn the **Internet** in a Weekend, and Increase Your Web Traffic in a Weekend. You can contact him at writing@tvpress.com.

FIGURE 1: SMIL lets you comfortably access **several** multimedia files at once, even with a slow **Internet** connection.

FIGURE 2: SMIL productions are delivered on channels, such as the Screening Room channel...

36/3,K/28 (Item 28 from file: 275)  
DIALOG(R)File 275:Gale Group Computer DB(TM)  
(c) 2005 The Gale Group. All rts. reserv.

01745245 SUPPLIER NUMBER: 16548267 (USE FORMAT 7 OR 9 FOR FULL TEXT)  
**Media distribution systems bring a world of information into classrooms.**  
(includes related table of vendors)

Carmona, Jeff

T H E Journal (Technological Horizons In Education), v22, n6, p12(4)  
Jan, 1995

ISSN: 0192-592X LANGUAGE: ENGLISH RECORD TYPE: FULLTEXT; ABSTRACT  
WORD COUNT: 1782 LINE COUNT: 00156

...ABSTRACT: media and classrooms having access to the media through a monitor and remote control panel. **AMX** Corp offers the Synergy Electronic Classroom System with features that include off-line recording of...  
... are students, who can access a broader world of information without ever leaving their desks.

\* **AMX** 's Synergy Systems

Whether exploring ancient history on CD-ROM encyclopedias or watching breaking news...

...are part of a dynamic multimedia learning environment with the Synergy Electronic Classroom Systems from **AMX** Corp.

Some of the features of this system are programmable off-line recording of satellite...

...track usage by courseware, instructor and equipment. A master clock in the media center computer **synchronizes** all rooms and schedules; it can even interface to a period bell.

SchoolNet runs over...

COMPANY NAMES: **AMX** Corp...

TRADE NAMES: **AMX** Synergy Electronic Classroom Systems (Special-purpose computer system...

19950100

36/3,K/53 (Item 2 from file: 647)  
DIALOG(R)File 647:CMP Computer Fulltext  
(c) 2005 CMP Media, LLC. All rts. reserv.

01221418 CMP ACCESSION NUMBER: EET20000821S0004  
**Digital jukeboxes, Web players gear up despite copyright concerns - Home  
stereo tunes in Web music**  
Junko Yoshida and Margaret Quan  
ELECTRONIC ENGINEERING TIMES, 2000 , n 1127, PG1  
PUBLICATION DATE: 000821  
JOURNAL CODE: EET LANGUAGE: English  
RECORD TYPE: Fulltext  
SECTION HEADING: News  
WORD COUNT: 1257

, 2000  
... Calif.), joining early entries sold over the Web from small  
players like Remote Solutions and **Request Multimedia** . That's well in  
advance of the Secure Digital Music Initiative's definition of an...

...said Hock Lepow, chief technology officer and senior vice president at  
Creative Labs.

At the **same time** , S3's Reed said, "Our challenge is to pick the  
right format. It is our...  
...site.

Other companies have introduced non-SDMI-compliant digital audio  
jukeboxes as well. In April, **Request Multimedia** Inc. (Troy, N.Y.)  
rolled out a \$799 jukebox for digital audio based on an...

...formats, but can also support Windows Media Audio formats via an  
Internet download.

SDMI sidestep

**Request Multimedia** president Steve Vasquez said the company  
avoided dealing with the issue of SDMI-mandated content [audiorequest.com](http://audiorequest.com).

Like its larger competitors, **Request Multimedia** envisions the  
home MP3 system as "the central point for music in the home," Vasquez...  
...COMPANY NAMES (DIALOG GENERATED): Forward Concepts Inc ; Fujitsu ;  
Hango ; InterTrust Corp ; IBM Corp ; Microsoft Corp ; Real Networks ;  
Remote Solutions ; **Request Multimedia** Inc ; Rio Division ; Secure  
Digital Music Initiative ; Sony ; S3 Inc ; Universal Music Group ;  
Windows Media